Extended Sites in WebSphere Commerce V5.6.1

Create customizable, lightweight storefronts

Share resources across multiple stores

Consumer direct and B2B direct store models

Chris McCollum

Redbooks

ibm.com/redbooks

International Technical Support Organization

Extended Sites in WebSphere Commerce V5.6.1

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Note: Before using this information and the product it supports, read the information in "Notices" on page xv.

First Edition (August 2005)

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Contents

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Preface

This IBM® Redbook is a customization and deployment guide for IBM WebSphere Commerce V5.6.1 using the Extended Sites model. The book provides IT architects, developers, and administrators with the critical knowledge to deploy, customize, and manage a WebSphere® Commerce runtime environment and Extended Sites hub with multiple stores.

Part 1, Introduction to Extended Sites, provides an overview of the hosting model in WebSphere Commerce V5.6.1 Business Edition and then discusses what is included in the eSite.sar that is available with this book. Following this is a discussion about patterns and a detailed look at the Hosting Composite Pattern and its application in our example hosting site.

Part 2, Create Extended Sites, includes an overview of our development and deployment environment and processes. It starts with publishing the ExtendedSites.sar file, creating needed organizations, users, and stores. Details for customizations to the storefronts are provided.

Part 3. Manage Extended Sites, covers the different levels of management in an Extended Sites environment: site, hub, and individual store.

Part 4, Appendixes, includes WebSphere Commerce implementation, WebSphere Commerce Studio implementation, common procedures, and error handling scenarios.

The team that wrote this redbook

Figure 1 Chris McCollum

This redbook was produced by a team of specialists from around the world working at the International Technical Support Organization, Austin Center.

Chris McCollum is a Project Leader and IT Architect at the International Technical Support Organization, Austin Center. He writes extensively and teaches IBM classes worldwide on all areas of e-commerce. Before joining the ITSO in 2004, Chris worked in the e-commerce National Practice of IBM Global Services, United States as an IT Architect. Chris holds an MBA in Technology Management and has 20 years of experience in the IT industry.

Thanks to the following people for their contributions to this project:

Alex Lin
IBM Toronto Lab, Software Services for WebSphere

Karson Ng
IBM Toronto Lab, WebSphere Commerce B2B Solutions

Lev Mirlas
IBM Toronto Lab, WebSphere Commerce Architect

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Introduction to Extended Sites

In this part we discuss the goals and objectives of this book, key operational concepts of WebSphere Commerce, and introduce the Extended Sites business model and describe the underlying architecture to support it.

This part includes the following chapters:

Introduction

This chapter describes our objectives, our focus, who can benefit from the content of this book, and where to find additional information.

This chapter contains the following sections:

- Our objectives
- Conventions used in this book
- Target audience of this IBM Redbook
- For more information

1.1 Our objectives

The objective in writing this IBM Redbook is twofold. The first is to provide an overview of the Extended Sites model in WebSphere Commerce V5.6.1 Business Edition. The second is to provide an example implementation of the Extended Sites model that focuses on two key aspects: customization and administration in a multi-storefront environment.

The goal is to provide information to current and future clients of WebSphere Commerce about how best to install, customize, and administer an e-commerce site based on WebSphere Commerce V5.6.1 Business Edition and the Extended Sites model.

This book does not delve deeply into the architecture of WebSphere Commerce or the programming model. Prior knowledge in these areas is recommended along with experience in installing and customizing WebSphere Commerce, particularly the Business Edition.

1.2 Conventions used in this book

The following terminology conventions are used for substituted values:

- *wc_installdir* indicates the installation directory for WebSphere Commerce. The default installation directory for WebSphere Commerce on the Windows® 2000 operating system is:

  `C:\Program Files\WebSphere\CommerceServer561`

- *was_installdir* indicates the installation directory for WebSphere Application Server. The default installation directory for WebSphere Application Server on the Windows 2000 operating system is:

  `C:\Program Files\WebSphere\AppServer`

- *wcde_installdir* indicates the installation directory for WebSphere Commerce Developer. The default installation directory is:

  `C:\WCToolkitBE561`

- *dbname* indicates the name of the WebSphere Commerce or WebSphere Commerce Payments database.
- *dbuser* indicates the user ID that owns the schema in the WebSphere Commerce or WebSphere Commerce Payments database.
- *dbpassword* indicates the password for the associated *dbuser*.
- *node_name* indicates the short name of the computer. This is the first part of the *host_name*, without the domain.

- *host_name* indicates a fully qualified host name to be substituted in a Web address. The host name for our WebSphere Commerce server was:

  `CMW2KPRO1.AUSTIN.IBM.COM`

- *server_name* indicates the name of the server in WebSphere Application Server. The default server name for a WebSphere Commerce server is:

  WC_*wc_instance_name*

  The default server name for a WebSphere Commerce Payments server is:

  *wpm_instance_name*_Commerce_Payments_Server

- *wc_instance_name* indicates the name of the WebSphere Commerce instance. The default instance name is demo.
- *wpm_instance_name* indicates the name of the WebSphere Commerce Payments instance. The default name is wpm.

Note: All of the development and testing for this book was done on the Windows platform. All references to OS-specific functions refer to the Windows platform unless otherwise indicated.

1.3 Target audience of this IBM Redbook

As is the nature of a handbook, this book is multi-purpose: It includes architecture, design, development, customization, deployment, and administration topics. The target audience can be best matched by role to the topic of interest within the book.

1.3.1 Roles and skills

Several common roles are needed for a team to execute a WebSphere Commerce hosting project during the development life cycle. In this section, we define the following key roles and skills to be used as a cross-reference with the topics of interest within the book:

- Project manager
- IT architect
- Database administrator (DBA)
- Java™ programmer
- Web developer
- Tester
- Line-of-business (LOB) user
- Site administrator
- Hub administrator
- Seller/store administrator

Project manager

The project manager is responsible for managing and leading the project team throughout all phases of the project and acts as a contact point to interact with the client. The project manager should have a general understanding of the WebSphere Commerce product and be familiar with the product architecture.

IT architect

The IT architect looks after the overall project technical architecture design, quality assurance of the solution, knowledge transfer to clients, and mentoring to the project technical team members. The architect should have WebSphere Commerce architecture and design skills. Based on project scope and complexity, one or more WebSphere Commerce architects can work to create detailed project technical designs. The work effort can be divided based on common WebSphere Commerce subsystems, such as Catalog, Member, Order, and communication with back-end or enterprise systems. The technical design is developed with the assistance of the lead developer.

Database administrator (DBA)

The WebSphere Commerce V5.6.1 database schema contains more than 600 tables with numerous columns. It is critical that someone on the development team be very familiar with the WebSphere Commerce database schema for development implementation and migration. In addition, the database owner is often responsible for managing the WebSphere Commerce XML data files that are used to populate the WebSphere Commerce instance database with catalog, store, and site data. The DBA is responsible for creation and migration of the WebSphere Commerce instance database and ongoing database operations.

Java developer

The WebSphere Commerce programmer is responsible for the Java programming of the application assets of the site. The WebSphere Commerce architect/technical lead can also participate in implementing the new or transitioned site. The WebSphere Commerce programmer must have in-depth knowledge of the WebSphere Commerce framework, programming, and store models. In addition, they must have a strong background in J2EE™ programming and development tooling. The focus of the Java programmer is on developing WebSphere Commerce commands (servlets) and EJBs.

Web developer

The Web developer focuses on the front-end assets, such as JavaServer™ Pages™ (JSPs), HTML, and management of product images within the display pages.

Tester

There are many types of tests, such as unit test, functional verification test (FVT), system verification test (SVT), integration test, and customer acceptance test (CAT). The test lead is responsible for developing and executing a test plan for quality assurance. The members of the test team should be well versed in the product architecture, features of the site, and operational usage to simulate the transactions of a shopper and a line-of-business user.

Site administrator

The WebSphere Commerce site administrator installs, configures, and maintains WebSphere Commerce and the associated software and hardware. The site administrator responds to system warnings, alerts, and errors, and diagnoses and resolves system problems. This role typically controls access and authorization (creating and assigning members to the appropriate role), manages the Web site, monitors performance, and manages load balancing tasks. The site administrator may also be responsible for establishing and maintaining several server configurations for different stages of development such as testing, staging, and production. This role also handles critical system backups and resolves performance problems. For very large sites, some of the installation and configuration task may be performed by the system administrator.

Hub administrator

This role, which manages stores within an Extended Sites hub, is unique to the Extended Sites and hosting models. While this role could be performed by the site administrator, it is more aligned with the stores to ensure coordination of activities (marketing, catalog management) among individual stores. When the ExtendedSites.sar file is published, the `extendedsitesadmin` user is created. This is the hub administrator. This user is granted the authority to create stores within the hub and access the various asset stores that are created.

Line-of-business (LOB) user

The line-of-business (LOB) users are typically responsible for managing the operations of the site. They can be marketing users where they are responsible for promoting the Web site to shoppers, managing the data needs for catalog management, and shopper service-related tasks. Within WebSphere Commerce, there are many predefined roles that can be assigned to LOB users. The WebSphere Commerce administration tools can be configured to allow access only to specific functions within the tools by user role assigned to the user logged into the tool.

1.3.2 Matching topics in this book to roles and skills

Table 1-1 provides a summary of this book's diverse topics by part and chapter, aligning them with the defined roles and skills.

Table 1-1 Matching redbook topics to roles and skills

Part	Chapter	Primary	Secondary
Part 1, "Introduction to Extended Sites"			
	Chapter 1, "Introduction" on page 3	All roles	
	Chapter 2, "WebSphere Commerce basics" on page 11	All roles	
	Chapter 3, "Extended Sites in WebSphere Commerce" on page 61	All roles	
Part 2, "Create Extended Sites"			
	Chapter 4, "Scenario description" on page 81	All roles	
	Chapter 5, "Publish the sar" on page 85	Site admin	DBA
	Chapter 6, "Create a new asset store" on page 99	IT architect	Web developer
	Chapter 7, "Create organizations and users" on page 105	Site admin	DBA
	Chapter 8, "Create and customize the stores" on page 123	Site admin	Web developer
Part 3, "Manage Extended Sites"			
	Chapter 9, "Manage the site" on page 201	Site admin	DBA
	Chapter 10, "Manage the hub" on page 261	Hub admin	Site admin
	Chapter 11, "Manage a consumer direct store" on page 325	LOB user	Site admin
	Chapter 12, "Manage a B2B direct store" on page 417	LOB user	Site admin
Part 4, "Appendixes"			
	Appendix A, "WebSphere Commerce implementation" on page 449	Site admin DBA	Tester
	Appendix B, "WebSphere Commerce Developer implementation" on page 467	Java developer Web developer	DBA
	Appendix C, "Common procedures" on page 475	Site admin Hub admin	DBA
	Appendix D, "Additional material" on page 489	Site admin Java developer Web developer	DBA

1.4 For more information

A vast amount of information is available about WebSphere Commerce and related topics such as WebSphere Application Server, WebSphere Studio Application Developer, and DB2®. Sometimes the key to solving a problem is knowing where to find the necessary information. This section highlights the key product documentation and IBM Redbooks.

See "Related publications" on page 499 for detailed information about relevant Redbooks and Web sites.

1.4.1 IBM WebSphere Commerce product documentation

Even if you are a big fan of IBM Redbooks, you should be aware that a vast amount of knowledge is available only in the product documentation. The product documentation PDFs and online help are updated periodically and can be downloaded from the WebSphere Commerce Technical Library, which for IBM WebSphere Commerce V5.6.1 Business Edition is found at:

`http://www.ibm.com/software/genservers/commerce/wcbe/library/lit-tech-general-en.html`

The product documentation is categorized as follows:

- Introductory documents
  - Readme
  - WebSphere Commerce Analyzer Readme
  - Getting Started
- Information Center
  - WebSphere Commerce Information Center

    Documents available in previous versions of WebSphere Commerce are now incorporated into the Information Center. This includes the following guides: Programming, Store Developer's, Administration, Security, WebSphere Commerce Accelerator Customization, Sample Store, Web Services, Calculation Framework, WebSphere Commerce Analyzer Technical Reference, and WebSphere Commerce Analyzer Datamart Reference. Find the Information Center at:

    `http://publib.boulder.ibm.com/infocenter/wc56help/index.jsp`
- Installation documents
  - Installation Guide
  - Additional Software Guide

- Migration documentation
  - Migration Guide, from 5.4 to 5.6.1
  - Migration Guide, from 5.5 to 5.6.1
- Commerce Payments documents (found in the WebSphere Commerce Information Center)
  - CustomOffline Cassette Supplement
  - OfflineCard Cassette Supplement
  - Cassette to BackServACH Supplement
  - Cassette for Paymenttech Supplement
  - Cassette for VisaNet Supplement
  - Programming Guide and Reference
  - Cassette Kit Programming Guide

1.4.2 IBM Redbooks

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`http://www.ibm.com/redbooks`

See "Related publications" on page 499 for lists of individual Redbooks and other related documentation.

If you are interested in participating in creating an IBM Redbook, Redpaper or workshop, click the **Residency** link on the IBM Redbooks Web site.

WebSphere Commerce basics

This chapter discusses several topics within WebSphere Commerce that are used throughout the remainder of the book in describing Extended Sites functionality. It is important that the concepts in this chapter are well understood before attempting to install and configure an Extended Sites implementation.

This chapter contains the following sections:

- Business models
- Stores
- Store relationships
- Catalogs
- Business accounts and contracts
- WebSphere Commerce flow infrastructure
- Access control concepts
- E-mail activities

2.1 Business models

A business model, in WebSphere Commerce, provides a sample commerce solution that includes an organization structure, default user roles and access control policies, one or more starter stores, administration tools, and business processes that demonstrate best practices. A business model can be customized to support changing business requirements and scenarios.

WebSphere Commerce provides the architectural infrastructure to create online businesses that fit into one of the following business models:

- Direct sales
  - Consumer direct (B2C)
  - B2B (business to business) direct
- Value chain
  - Demand chain
  - Supply chain

Note: Extended Sites is referred to as a business model in the WebSphere Commerce Information Center. A starter store, ExtendedSites.sar, is provided. This starter store includes an organization structure, default user roles and access control policies, administration tools, and business processes. These features are used to support the Extended Sites implementation of direct sales in either the consumer direct or B2B direct business models. Extended Sites is available only in the WebSphere Commerce Business Edition.

An additional business model supported by the WebSphere Commerce Business Edition is hosting. Hosting, like Extended Sites, supports either consumer direct or B2B direct stores out-of-the-box. Hosting is a unique business model in that the operator of the site is not the operator of the stores. Stores are operated by third-party store owners who subscribe to the hosting service.

2.1.1 Direct sales

In a direct sales business model, the operator of the online business sells goods and services directly to the end consumer or another business.

Consumer direct business model

Consumer direct supports commerce transactions involving products, services, or information between businesses and consumers. Consumers typically purchase goods or services directly from a business in a consumer direct scenario.

In a typical consumer direct business, customers buy directly from the business, which can be a retailer, a manufacturer who sells its goods directly to consumers through its own retail outlet, or any other business that sells goods or provides services directly to consumers. For example, a business that sells to consumers directly through a catalog would be considered a consumer direct business.

Organizations that are not traditionally considered businesses, such as governments, can sometimes implement sites based on the consumer direct business model. This occurs in such cases where governments provide goods and services directly to consumers.

B2B direct business model

B2B direct supports commerce transactions involving products, services, or information between two businesses or parties. Typical B2B direct transactions occur between buyers, suppliers, manufacturers, resellers, distributors, and trading partners.

In a typical B2B direct business, businesses purchase goods or services directly from another business. The selling business can be a wholesaler, a distributor, a manufacturer, or a retailer who sells to buyers from other businesses.

Organizations that are not traditionally considered businesses, such as governments, may sometimes implement sites based on the B2B direct business model. This occurs in such cases where governments provide goods and services directly to businesses.

2.1.2 Value chain

Value chains are supported through two business models: demand chain and supply chain. WebSphere Commerce supports the transactions through, and relationship management of, both the demand chain business model and supply chain business model. Value chains support transactions involving multiple enterprises or parties. Products, goods, services, or information are delivered through the parties of the value chain from producers to end users. A value chain also has relationship and administrative aspects; that is, you can manage the relationship of the partners or enterprises in your value chain, as well as offer some administrative services to those parties.

As a result, value chains must manage the two sides of their businesses: their customers and direct sales, and their channel partners and suppliers. Each requires its own management channels and practices.

To sell directly to customers (direct sales), value chains usually include a storefront where customers can purchase their goods or services directly.

To manage relationships with partners or suppliers, the demand chain and supply chain models within the value chain include a hub. Under these models, value chain administrators can administer the operational aspects of the value chain in the hub, including enabling partners or suppliers to participate in the value chain by registering them, setting them up, and conducting various operations. Partners and suppliers can also access the hub to complete administrative tasks such as registering users.

Demand chain business model

A demand chain is composed of the enterprises that sell a business's goods or services. For example, a demand chain may consist of buyers who initiate the sales transaction, the resellers who sell the manufacturer's goods, and the manufacturer who creates the goods. A demand chain may be composed of the resellers who sell a manufacturer's goods, the manufacturer who makes the goods, and the distributors who supply the manufacturer's goods to the resellers. Demand chains also support direct sales channels, in which the demand chain owner sells directly to consumers or business partners.

To locate distributors, the reseller may browse a product catalog in the private hub. If the desired products are available from more than one distributor, the reseller can check product availability and prices for various distributors. Then, if the reseller chooses, they can split their order among several distributors who complete the transaction and deliver the goods or services to the reseller. The reseller can then use these goods or services to fulfill its customers' orders.

Demand chain stores

The demand chain owner may create a site with stores for its channel partners, such as resellers or distributors. This reduces the infrastructure costs to the reseller or distributor who may not have the expertise or capital to create and maintain their own site. A reseller may use the site to sell goods from the catalog maintained by the demand chain owner, and also offer its own value-added products, services, or bundles. The reseller or distributor in this case can also decide to administer his or her own store, or leave it to the demand chain owner.

Other scenarios

The examples described in this section are just a few instances of demand chains. The scenario details may change depending on the type of business being conducted. For example, if the enterprise is a manufacturer, the purpose of the hub may be to help the manufacturer's resellers locate the manufacturer's goods from several distributors. If the enterprise is a distributor, the purpose of the hub may be to help the distributor's resellers find goods or services from several different suppliers.

Types of stores

Figure 2-1 illustrates the types of stores that make up the demand chain sample.

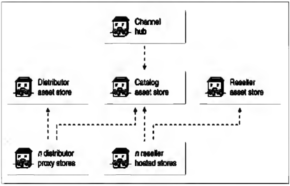


Figure 2-1 Demand chain stores

The demand chain sample site contains a channel hub and three asset stores: distributor asset store, catalog asset store, and reseller storefront asset store. The reseller asset store can be either a consumer direct or B2B direct store and resellers select the store type when they create the store. Note that the channel hub uses the catalog assets defined in the catalog asset store. The distributor proxy stores are creating by using the assets from the distributor asset store, while the reseller stores are created by using the assets from the catalog asset store and reseller storefront asset store. Resellers may choose to sell a subset of products defined in the shared catalog via the catalog asset store. They may also create their own products or bundles in their reseller store.

Supply chain business model

A supply chain is composed of the enterprises that provide services to a business. WebSphere Commerce provides the architectural infrastructure to support supply chains that take the form of a private marketplace, as well as through supplier sites.

A private marketplace provides a forum for vendors to offer their goods and services for sale. Buyers enter this forum and, after browsing through the available options, select the appropriate goods or services.

Supply chain stores

The supply chain owner may create stores for its suppliers so buyers can interact directly with suppliers (for example, by submitting orders under prearranged contracts). Supplier stores can coexist with a private marketplace so buyers can

purchase directly from their suppliers or select suppliers through the private marketplace.

Types of stores

Figure 2-2 illustrates the types of stores that compose the supply chain sample.

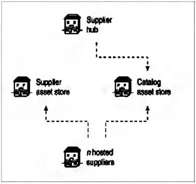


Figure 2-2 Supply chain stores

The supply chain sample site contains a hub (supplier hub) and two asset stores (catalog asset store and supplier asset store). Note that the supplier hub uses the assets defined in the catalog asset store. The suppliers are created by using the assets from the catalog asset store and supplier asset store.

Note: The supplier hub owner defines the catalog taxonomy (for example, the category structure and possibly shared products and items) that the suppliers will use in the catalog asset store.

2.2 Stores

In WebSphere Commerce an online store is the place where all transactions for your online business occur. All online stores created with WebSphere Commerce include at least one of the following types of assets:

- Storefront

  The external portion of your store, or the portion that displays to your customers, is known as the storefront. The storefront consists of Web assets such as HTML pages, JSP™ files, style sheets, images, graphics, and other multimedia file types.

- Business logic

  The portion of your store that processes customer requests, including the commands and any customized code, is known as the business logic.

- Store data

  The data assets that comprise your store. To operate properly, a store must have the data in place to support all customer activities. For example, in order for a customer to make a purchase, your store must contain a catalog of goods for sale, shipping methods and shipping charges, taxes, and the inventory to fulfill the request. Your store must also have methods for authorizing and processing payments.

If a store contains all three types of assets, it is a fully operational store. If a store contains only a subset of the assets (for example, storefront assets and business logic, or store data and business logic, or just store data), it is known in WebSphere Commerce as an asset store.

WebSphere Commerce supports several different types of entities that are defined as stores:

- Customer-facing stores
- Asset stores
- Proxy stores

2.2.1 Customer-facing stores

An online site where users may obtain information regarding products and conduct business transactions over these products. Business transactions may include retail purchases, transactions between businesses, and transactions between a government organization and citizens or businesses. WebSphere Commerce uses the generic term *store* to describe the online space where all of these business transactions take place.

Customer-facing stores are stores that provide a Web storefront that customers can access directly. These stores are the main components of a site. WebSphere Commerce supports the following customer-facing stores:

- Consumer direct

  A store that supports commerce transactions involving products, services, or information directly between businesses and consumers.

- B2B direct

  A store that supports commerce transactions involving products, services, or information between two businesses or parties.

- Hub

  A site that enables its customers or partners to access products or services available from one or more partners or clients of the hub owner, through the use of other stores on the site.

- Extended Site

  A site that enables your selling organization to provide unique storefronts for different enterprise customers or showcase a number of branded storefronts. Creation and management of the Extended Sites is through the hub in Commerce Accelerator. These Extended Sites may share much of the data, such as master catalog and list prices, and presentation information. An extended site store can be a B2B direct or consumer direct store.

  Note: These are also referred to as *lightweight* stores or *hosted* stores in the hosting model.

For direct sales (whether consumer direct or B2B direct) stores or hub sites, you must create storefront assets, business logic, and store data for each store. These assets can be created traditionally, by creating the assets for that store only, or by creating the assets to be used by other stores. This is done by creating the storefront and business logic assets either in an asset store or as data that can be used across stores. You may also want to use assets from other stores to create portions of your direct sales (whether consumer direct or B2B direct) stores or hub sites.

In the samples provided with WebSphere Commerce, the majority of the Extended Sites are created by sharing assets from existing asset stores. For example, rather than creating the storefront or catalog assets for each store, you use the storefront and, depending on your business, the catalog from another store. To facilitate creating stores, WebSphere Commerce uses asset stores.

2.2.2 Asset stores

To facilitate the creation and management of multiple stores such as customer-facing stores and proxy stores, WebSphere Commerce implements asset stores. Asset stores contain collections of sharable resources (business artifacts, business processes, and storefront assets) that can be leveraged in other stores. For example, instead of creating a catalog as part of the hub, a hub may leverage a catalog asset store, which can also be shared by the hub's channels or partners. As a result, a simple catalog can be used by hundreds or thousands of stores, thereby reducing data management needs. An asset store is usually composed of the assets that can be used by multiple stores, but is in itself not a fully functional store and does not conduct business transactions.

WebSphere Commerce provides sample catalog asset stores and storefront asset stores. Figure 2-3 illustrates the relationship between stores and a catalog asset store.

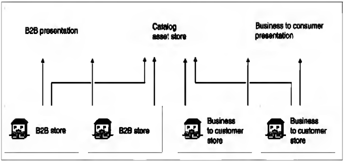


Figure 2-3 Asset store model

2.2.3 Proxy stores

WebSphere Commerce also supports entities known as proxy stores. A proxy store is a store that represents a business partner's operational assets and provides the business logic that enables the WebSphere Commerce site to interact with an external business partner. The proxy store also contains operational data that gets updated in interaction with the business proxy site. For example, a proxy store may capture the orders transferred to a remote order capture system, as well as capturing the suppliers' inventory information or the information sent to a supplier's fulfillment centers. Unlike a customer-facing store, a proxy store does not include a storefront and cannot be accessed by users.

Creating a proxy store is very similar to creating a store in an extended site, in that the majority of the proxy store assets are provided from existing stores (including asset stores). As implemented in the samples provided with WebSphere Commerce, the proxy store does not include a storefront. Figure 2-4 illustrates the distributor proxy stores using the assets from the distributor asset store and the catalog asset store.

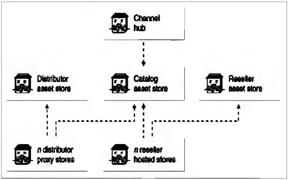


Figure 2-4 Proxy stores

Rather than providing a user interface wizard to create a proxy store, WebSphere Commerce implements proxy stores through service agreements, which are then imported via a user interface into WebSphere Commerce, creating the proxy store. The service agreement is governed by a template, which determines what information you need to create. The template for creating proxy stores (TemplateReferralContract.xml) is available in the following directory:

```
<wc_installdir>\xml\trading\xml
```

To create the proxy store, create a new service agreement following the template and then using the user interface, import it into WebSphere Commerce.

2.2.4 Examples of multiple stores in a single instance

WebSphere Commerce enables you to support multiple online stores within your WebSphere Commerce Server instance. Figure 2-5 illustrates some possible store configurations.

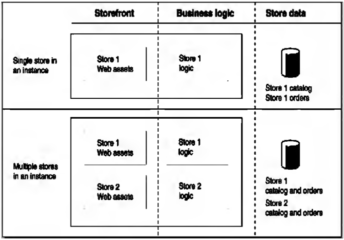


Figure 2-5 Multiple stores in an instance

The stores detailed in Figure 2-5 are stand-alone stores. That is, although they are in the same instance, they do not share any data or have relationships with each other. They have separate storefronts, business logic, and store data.

You can also create multiple stores in an instance that share the same storefront, the same business logic, or the same store data (including catalogs), or any combination of the three. Figure 2-6 on page 22 illustrates some possible configurations in which stores share assets.

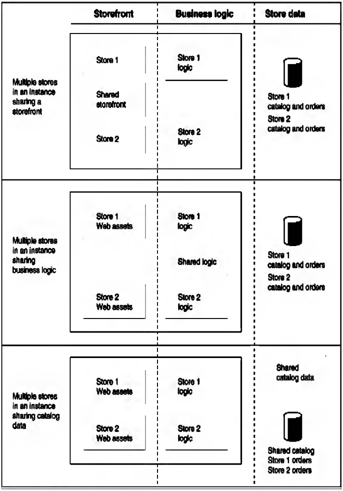


Figure 2-6 Multiple stores sharing assets

Note: Figure 2-6 lists only a few possible configurations between multiple stores in an instance. Stores may share more than one asset type; for example, multiple stores in a site could share storefronts, business logic, and data, or any combination of the three.

For more information about how multiple stores in an instance share common store assets, see 2.3, "Store relationships" on page 23.

Multiple stores can exist in a single Stores Web module. If so, the store assets are separated using the following methods:

- Storefront assets

  Storefront assets for each store in the Stores Web module are stored in a separate store directory (storedir). For example, all storefront assets for MyStore are in the MyStore directory.

- Business logic

  The store ID is used to select the command implementation for each store, as specified in the command registry.

- Store data

  Data assets are identified for each store by a unique index. Store data can include core data assets (such as data about organizations, stores, or relationships between stores), the WebSphere Commerce instance data assets, configuration data assets (such as command, view, and URL registries), managed data (such as catalog, tax and shipping, and promotions), and operational data (such as inventory and orders).

2.3 Store relationships

The key to the successful management of a large multi-site installation lies in the seller's ability to manage a single set of assets that are shared among many stores. Rather than duplicating assets for each store, the store can share existing assets as needed. A good example of this is an installation with two stores: one B2B direct and one consumer direct (B2C). Each store can selectively share the contents of a single catalog rather than requiring that a separate catalog be created for each. If one store requires products unique to itself, those products can be added to the catalog and only that store can access them.

The mechanism that WebSphere Commerce uses to share data assets such as catalogs is called the *store path*. Figure 2-7 on page 24 shows an example of the store path.

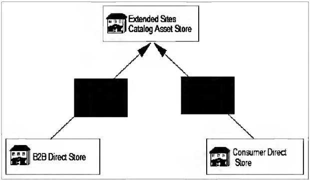


Figure 2-7 Store path

An asset store is created to hold the catalog data. The two customer facing stores do not contain any catalog data. Instead they set their store paths to point to the catalog asset store. The business logic within WebSphere Commerce uses this store path to retrieve the catalog data, making it seem that it is inside the customer facing stores.

It is also possible for each customer facing store to maintain its own products in the catalog. In this case, products created by the B2B direct store would not be visible in the consumer direct store, and those created in the consumer direct store would not be visible in the B2B direct store. Each store would have access to the filtered version of the shared catalog as well as those products that were created within the store.

The store path in WebSphere Commerce provides the architecture for a variety of relationships between stores in order to support:

- Multiple stores in a site having the same:
  - Storefront
  - Business logic
  - Store data
  - Any combination of shared assets
- Other types of relationships between stores in a site such as:
  - One store hosting another
  - Transferring shopping carts from one store to another
  - Relationships between stores that allow one store to provide a service to another store. For example, store A may host store B, or store C may use the catalog data from store D.

Code that supports each store relationship is required to implement these store relationships. WebSphere Commerce includes many store relationships and the supporting code. These store relationships can be loosely grouped into the following categories.

Relationships in which one store provides assets to another store. These types of store relationships include one store providing the following:

- URLs
- Commands
- Business policies
- Campaigns
- Promotions
- Property files
- Currencies

Relationships in which one store has a business relationship with another store. These types of store relationships include:

- One store hosting another
- One store referring orders and RFQs to another store

Table 2-1 provides a description of the predefined store relationship types.

Table 2-1 Store relationship descriptions

Type	Name	Description
-1	IBM commerce business policy	One store uses business policies defined in another store.
-2	IBM commerce tax	
-3	IBM commerce campaigns	One store uses campaigns defined in another store.
-4	IBM commerce catalog	One store uses catalog data defined in another store.
-5	IBM commerce command	One store uses commands defined in another store.
-6	IBM commerce hosted store	The hub store hosts the reseller, supplier, or hosted store.
-7	IBM commerce price	One store uses price data defined in another store.

Type	Name	Description
-8	IBM commerce referral	The hub store has referral relationships with distributors. The hub store may transfer a shopping cart to a distributor store. Usually the store receiving the shopping cart is a proxy store for an external system.
-9	IBM commerce segmentation	One store uses customer segmentation data defined in another store.
-10	IBM commerce URL	One store uses URLs defined in another store.
-11	IBM commerce view	One store uses views defined in another store.
-12	IBM commerce event	
-13	IBM commerce inventory	
-14	IBM commerce store item	One store uses items defined in another store.
-15	IBM commerce channel store	One store acts as the hub store for another store. This relationship defines the relationship between the store directory and the hosting hub.
-16	IBM commerce property files	One store uses property files defined in another store.
-17	IBM commerce currency conversion	
-18	IBM commerce currency format	
-19	IBM commerce supported currency	One store uses currencies supported in another store.
-20	IBM commerce counter value currency	One store uses currency counter values defined in another store.
-21	IBM commerce measurement format	One store uses units of measurement defined in another store.
-22	IBM commerce contract	Allows a contract in one store to refer to a contract defined in another store.
-23	IBM Promotions Relationship	

The database tables that are used to define the store path are:

- STRELTYP

  The store relationship type defines all the assets that can be shared.

- STOREREL

  Defines a relationship between an asset store and an Extended Site store.

2.4 Catalogs

Catalogs are simply a collection of catalog entries. Catalog entries represent merchandise in an online catalog that often includes a name or part number, a description, one or more offer prices, images, and other details. A catalog entry can be a product, item, package, bundle, or dynamic kit.

Catalog entries can be a single item (atomic) or composed of several other catalog entries (composite). When atomic, a catalog entry is an individually orderable entity that needs no further SKU resolution. When composite, a catalog entry represents unresolved products, packages, or bundles that may need additional information before becoming atomic entities.

Certain catalog entries may need further processing before being added to an order. An example is resolving a product into an item through SKU resolution, performed by the `ResolveSkuCmd` task command.

If necessary, you can create new CatalogEntry type objects that do not fit into one of the existing Product, Item, Package, Bundle, or DynamicKit models.

There are two types of catalogs in WebSphere Commerce:

- Master catalogs
- Sales catalogs

2.4.1 Master catalogs

The master catalog is the central location to manage your store's merchandise. Everything you need in your store is contained within the master catalog. It is the single catalog containing all products, items, relationships, and standard prices for everything that is for sale in your store.

Every store in the WebSphere Commerce system must have a master catalog. You can share the master catalog across stores and define as many stores as needed. You can use the Product Management tools in the WebSphere Commerce Accelerator to view and manage your master catalog.

Important structural restrictions for the master catalog:

- The master catalog must be a proper tree, which means that there are no cycles. You must avoid the following type of scenario: The parent category A has a subcategory B. It is important that B and any of B's subcategories are not the parent category of A.
- A product cannot belong to more than one category. To place a product in more than one category, use a sales catalog.
- The Product Management tools work only with products that are associated with a master catalog.

2.4.2 Sales catalogs

Every store in the WebSphere Commerce system must have a master catalog. Only one master catalog can exist at a time, and multiple stores can share a master catalog. However, you can create one or more sales catalogs for customer display purposes. A sales catalog has a flexible display structure that enables you to associate products to more than one category to suit the requirements of your store.

Sales catalogs enable you to maintain an unlimited number of catalog hierarchies and place products in any number of locations within a single sales catalog structure. Sales catalogs can be used to create unique hierarchies and product assortments for seasonal purposes, targeting specific customer segments or business customers. For example, you may have a Spring sales catalog, a Fall sales catalog, as well as a Gold-rated Customer sales catalog.

You can manage your sales catalog from the WebSphere Commerce Accelerator and perform the following tasks:

- Create, change, or delete sales catalogs. You can create sales catalogs based on segments of your master catalog, or choose to create one from scratch.
- Create, change, find, or remove categories. Select new parent categories and rearrange the category tree structure for a new look.
- Link a category. Take a category from one sales catalog to another sales catalog. That category, and all of its catalog entries, will then be displayed in both, or more, sales catalogs.
- Duplicate the structure of a category. From your master or sales catalog, you can duplicate a section of categories and subcategories to preserve a similar structure.
- Assign, find, or remove catalog entries from different categories.

Sales catalogs can be used in conjunction with the master catalog and contracts to control which products display for a particular customer. If a customer is not entitled to see a subset of the products in the master catalog, the contract system will make sure that customer does not see those products in the WebSphere Commerce store. The sales catalog can then be used to organize the products that the customer is entitled to see and purchase in a more meaningful way. For example, customers may buy products to support a business project. Instead of organizing products by department and subdepartment, it might be easier for the customer to find products when the products are arranged in a manner that matches the components of their project. In this scenario, a top-level category might be titled Network Replacement Project and the subcategories in the sales catalog would be Hardware and Software.

2.5 Business accounts and contracts

WebSphere Commerce enables you to customize what a customer can do in a store. This is referred to as customer entitlement. You entitle customers to various aspects of a store such as what products they can purchase from a store, the price they pay for a product, and what payment methods a store will accept from customers.

Customer entitlement is controlled by the following WebSphere Commerce components:

- Business accounts

  Business accounts help define and track the relationship between customer organizations and your store. Using business accounts, you can track contracts and orders for customer organizations and configure how buyers from customer organizations shop in a store.

  Note: The default contract is not associated with a business account. All other contracts must be associated with a business account.

- Contracts

  Contracts affect many parts of a customer's shopping experience, such as what products a customer is able to purchase, the price they will pay for the products, how they are allowed to pay for an order, and what addresses an order can be shipped to.

- Business policies

  Business policies are sets of rules followed by a store or group of stores that define business processes, industry practices, and the scope and characteristics of a store's or group of stores' offerings. They are the central

source and reference template for all allowed and supported practices within a store or group of stores.

2.5.1 Business accounts

Business accounts represent the relationship between a store and the store's customer organizations and are the starting point for managing business relationships. Business accounts can be used to track contracts and orders for customer organizations and configure how buyers from customer organizations shop in a store. Business accounts also control the ability of buyers from customer organizations to access a store's master catalog and see standard pricing for products contained in the master catalog. They are limited to products and prices covered by contracts that the customer organization has with a store.

Before creating a business account for a customer organization, the customer organization must already be defined within WebSphere Commerce. At least one person associated with the customer organization must be defined as a registered customer since a contact at the customer organization is required when creating a business account.

A business account contains the following information about a customer organization:

- The name of the customer organization and a contact person within that organization.
- The department and name of the account representative from the store assigned to the customer organization.
- Information about purchase orders a customer organization has with a store.
- How invoices are delivered to a customer organization.
- Whether the customer organization has a credit line.
- Any display customization information for the business customer. Store pages can be customized for a business account by specifying a piece of HTML code that can be used by a store's JavaServer Pages.
- Any general remarks about the business account.

Purchase orders

WebSphere Commerce provides the ability for you to track and authorize customer purchase order numbers. If a business account includes any purchase order terms and conditions and a contract specifies the use of that account, all purchases under the contract must specify a purchase order number defined with the account. A single purchase order number can then be used for payment authorization.

Purchase order numbers are specified when the customer places an order. Purchase order numbers can be specified for three types of purchase orders:

- Blanket purchase orders

  Used for an unlimited number of orders. Blanket purchase order numbers that will be accepted when placing an order must be specified in the business account before buyers attempt to specify a blanket purchase order number.

- Limited purchase orders

  Used for orders where the total amount of all orders made specifying the limited purchase order number does not exceed a spending limit. The spending limit for a limited purchase order is recorded and used to validate orders that specify a limited purchase order number to ensure that the spending limit is not exceeded. Limited purchase order numbers that will be accepted when placing an order must be specified in the business account before buyers attempt to specify a limited purchase order number.

- Individual purchase orders

  Used for one order and acceptable purchase order numbers are not predefined. You can specify that customers must use a unique purchase order number for each order placed on behalf of a business account. If you do not require a unique purchase order number for each order, customers may reuse purchase order numbers.

Blanket and limited purchase orders are also known as predefined purchase orders because purchase order numbers for these types of purchase order must be defined in the business account before buyers can use the purchase order numbers when making a purchase.

Purchase order numbers can be tracked and authorized for any payment method supported by WebSphere Commerce, including credit line.

Credit lines

A credit line is a payment method that provides the ability for a buyer to delay the payment settlement for all orders. The account holder is responsible for payment settlement on an outstanding balance on a credit line. If a credit line is used for payment, the seller debits the account for an order at the time of payment capture, and the account is credited during payment settlement.

> **Note:** Payment settlement for credit lines is handled outside of WebSphere Commerce. The system does not keep track of the payment settlement status.

Allowing a credit line as a method of payment is configured as part of business account management. Purchase order numbers may be specified when paying

for orders with credit lines, but a buyer is not required to use the credit line payment method when specifying a purchase order number. A buyer who wants to use a credit line as a method of payment must be authorized to use a contract, and the contract terms and conditions must specify that credit lines are allowed.

Credit lines can be removed any time after the account has been created. This is one way to stop the use of the credit line if an account becomes delinquent.

Invoices

An invoice is a document that notifies the account holder that an order has been released to fulfillment under their account and lists the following information for that order:

- Items
- Prices
- Purchase order numbers
- Shipping charges
- Total amount billed

A business account can record whether the invoice should be shipped by e-mail, regular mail, or included with a shipment. If the business account is configured to have invoices sent by e-mail, the invoice will be sent automatically when the pick batch for the release is generated.

Note: Only one invoice can be generated for a release.

Invoice terms and conditions specify the method for issuing the invoice. If the invoice is to be sent by e-mail, it is sent to the e-mail address of the buyer contact for the account. If the buyer contact does not list an e-mail address, the invoice is not sent. If the invoice is to be sent by mail or included with the shipment, use the generated XML data to print the invoices outside of WebSphere Commerce.

Display customizations

WebSphere Commerce enables you to change the look of display pages in your store for every business customer by specifying the DisplayCustomizationTC term and condition in the business account definition. This display customization can be as simple as adding a different logo, or as complex as having a custom store name and message, for each customer.

Display customization involves more than specifying the customized portion of a display page in the business account. It must be planned as a part of your store from the beginning. Pages in your store must be designed and coded to include the customizable portion of the page. The DisplayCustomizationTC is then used by WebSphere Commerce to locate the customized portion of the page.

You can create a business account that takes advantage of display customization using two methods:

- Define a business account in an XML file, specify the information defined in the DisplayCustomizationTC terms and conditions in the XML file, and import the business account XML file into WebSphere Commerce using the `AccountImport` command.
- Use the Account notebook within the WebSphere Commerce Accelerator to specify what to display to each customer.

2.5.2 Contracts

There are three types of active contracts associated with stores: base contracts, deployed or customer contracts, and default contracts.

A customer contract can refer to a base contract to share terms and conditions from the base contract. For example, contract A can refer to contract B. Thus, a buyer who is entitled to contract A will be entitled to all the terms and conditions from contract A, as well as to all the terms and conditions in contract B. Multiple customer contracts can refer to the same base contract so that all the customer contracts can share a set of terms and conditions.

There are no restrictions on what types of terms and conditions can be contained in either the base contract or the customer contract. Base contracts do not have to follow the set of contract minimum rules; that is:

- Base contracts do not have to have any participants specified.
- Base contracts do not have to have any pricing terms specified.
- Base contracts do not have to have a shipping charge type term.

For the terms and conditions where there must be one and only one per contract (for example, in the case of an order approval term), the order approval term can be in either the base contract or the customer contract, but not in both.

A shipping charge term may be specified in both the base and customer contract; however, the customer contract shipping charge term will override the base contract shipping charge term. The customer contract does not have to have a shipping charge term if there is one defined in either the base contract or the business account. The shipping charge term in the business account will also override a shipping charge term defined in the base contract.

For the terms and conditions where there must be at least one per contract (for example, one pricing term), the pricing term can be in the base contract or the customer contract, or in both.

For a customer who is entitled to a customer contract, the customer is entitled to all the terms and conditions in the customer contract, as well as all the terms and conditions in the base contract.

Customer contracts entitle specific buyer organizations or individual buyers and can be created using the WebSphere Commerce Accelerator after you have created your store. A customer contract is associated with one business account. A customer contract is one that is created between a buyer and a seller; in the case of the B2B direct model, that supersedes the default contract. A seller can create multiple contracts with a single buying organization as well as other buying organizations.

A default contract defines the default behavior of your store for buyers who do not have any other contracts with your store. A default contract can only be created using XML and only one default contract may be defined for a store. The default customer entitlement is defined by a store's default contract. This default contract usually specifies that customers can access the master catalog and purchase products at standard prices. Other aspects of store behavior are also covered by the default contract, such as what payment methods the store accepts and what shipping providers are used to send orders.

A typical contract consists of the following elements:

- Profile

  The contract profile contains the identifying information for the contract. This information includes a unique name for the contract, a short description, and a time period for which the contract is valid.

- Participants

  Contract participants are the organizations that take part in the contract. There is a buyer organization, a seller organization and contacts at both organizations.

- Terms and conditions

  Contract terms and conditions are the rules that cover the actual implementation of the contract. Contract terms and conditions cover such information as product pricing, returns and refunds, payment, shipping, and order approval.

- Attachments

  Contract attachments cover any information not covered by the previous elements such as file attachments that provide additional information about the contract and any general remarks about the contract. WebSphere Commerce stores Universal Resource Identifiers (URIs) for contract attachments, not the actual attachments.

- Reference

  A contract can refer to another contract to share its terms and conditions. For example, contract A can refer to contract B. Thus, a buyer who is entitled to contract A will be entitled to all the terms and conditions from contract A, as well as to all the terms and conditions in contract B.

2.5.3 Business policies

Business policies are sets of rules followed by a store or group of stores that define business processes, industry practices, and the scope and characteristics of a store's or group of stores' offerings. They are the central source and reference template for all allowed and supported practices within a store or group of stores.

In WebSphere Commerce, business policies are enforced with a combination of one or more business policy commands that implement the rules of the business policy. Each business policy command is a Java class. A business policy command can be shared by multiple business policies. The behavior of the business policy command is determined by the parameters passed to the command.

Parameters affecting the function of a business policy command can be introduced in three places:

- The contract term and condition referencing the business policy
- The business policy definition
- The business policy command itself

The business policy definition may specify a set of parameters that are automatically fed into each invocation of any of commands associated with the policy. A business policy command may specify additional parameters when it is invoked. Finally, a contract term and condition may proved extra parameters for a business command unique to the term and condition.

Business policy commands for the same type of business policy must have the same interface.

WebSphere Commerce provides the following categories of business policies:

- Catalog business policies

  Catalog business policies define the scope and characteristics of the catalog of products for sale in a store including prices and the categorization of products in a store's catalog.

- Payment business policies

  Invoicing, payment, and refund business policies define how a store accepts payments and pays refunds, as well as the format of a store's invoices.
- Returns business policies

  Returns business policies define whether refunds are accepted, the time period they are accepted for, and any restocking fees applied to returns.
- Shipping business policies

  Shipping business policies define the shipping providers a store can use and the charges associated with each type.
- Referral interface business policies

  Referral interface business policies define the relationship between a proxy store and a remote store.

Many contract terms and conditions reference business policies. This provides a measure of control over the nature of contracts a store enters into while still providing flexibility in creating the contract terms and conditions.

2.6 WebSphere Commerce flow infrastructure

WebSphere Commerce Flow describes the configurable features that are available in a store or site, and provides a means to enable or disable individual features. Store or site administrators can configure such features through a UI, such as the Change Flow notebook, changing the flow or style of the store or site without making any changes to its JSP or properties files. After applying the new store configuration, the changes are visible immediately by simply refreshing the store pages in the Web browser.

Figure 2-8 on page 37 illustrates the basic infrastructure of and interaction within and without WebSphere Commerce Flow, which are detailed in this section.

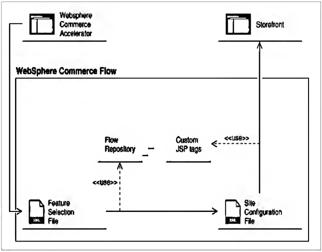


Figure 2-8 WebSphere Commerce flow

The main components of WebSphere Commerce Flow are:

- Flow Repository

  The Flow Repository is a collection of XML documents describing the store or site. There are two main parts to the repository:

  – A description of the site components

  – A description of all the configurable features available for the store

  Each element in the Flow Repository has a unique ID, so that it can be referenced by other elements in the repository as well as from other parts of WebSphere Commerce Flow, such as the Feature Selection File, Site Configuration File, custom JSP tags, and the UI.

- Feature Selection File

  The Feature Selection File (FSF) contains the set of store or site features that have been enabled. The FSF is updated by the Flow UI to capture the user's selections and represents a particular configuration of the store. Initially, the FSF contains the list of preselected features. The FSF is applied to the repository to generate the Site Configuration File.

- Site Configuration File

  The Site Configuration File (SCF) contains the minimum amount of information that is required to configure the store at run time. Namely, it contains the list of enabled features as well as the paths (URLs) for exit ports

and file references. At run time, the Flow custom JSP tags only use the SCF to determine which portions of the store's JSP pages should be enabled or disabled and which paths should be used.

- Custom JSP tags

  The user's ability to configure store or site features through the UI is accomplished by the WebSphere Commerce Flow custom JSP tags in the JSP files of the stores based on WebSphere Commerce starter stores.

2.6.1 Flow repository

This section provides a more in-depth description of the major components of the flow repository.

Site components

The WebSphere Commerce Flow Repository describes a set of JSP pages and the relationships among them. The JSP pages are grouped into the following abstract component hierarchy:

site; for example, ConsumerDirect

  area; for example, ShoppingArea

    section; for example, CheckoutSection

      subsection; for example, StandardCheckoutSubsection

      virtual-page; for example, ShippingAddressPage

      actual-page; for example, ActualSingleShippingAddressPage

Each component has an interface, and each interface can have one or more implementations. In particular, the repository must contain at least one top-level interface—for the site—and at least one implementation of that interface. An interface describes how to enter and leave the component by specifying entry-ports and exit-ports. An implementation specifies the interfaces that it contains, as well as the following implementation aspects:

- How the entry and exit ports of the containing interface map to the entry and exit ports of the contained interfaces
- How the contained interfaces are linked to each other

For example, the XML fragment in Example 2-1 on page 39 describes an area component, ShoppingArea, of a store.

Example 2-1 ShoppingArea description

```
<area id="ShoppingArea"/>

<interface id="ShoppingArea.i1" component-id="ShoppingArea">
    <entry-port id="ShoppingArea.i1.e1" type="EntryPortType1"/>
    <entry-port id="ShoppingArea.i1.e2" type="EntryPortType1"/>
</interface>

<implementation id="ShoppingArea.i1.impl1" interface-id="ShoppingArea.i1">
    <component-interface id="ShoppingArea.i1.impl1.ci1"
interface="CheckoutSection.i1" always-enabled="yes"/>
    <entry-port-map id="ShoppingArea.i1.impl1.epm1"
interface-entry-ports="ShoppingArea.i1.e1"
component-entry-port="CheckoutSection.i1.e1"/>
    <entry-port-map id="ShoppingArea.i1.impl1.epm2"
interface-entry-ports="ShoppingArea.i1.e2"
component-entry-port="CheckoutSection.i1.e2"/>
</implementation>
```

The actual-page components, found at the bottom of the component hierarchy, represent JSP pages of the site. Each actual-page component has an actual-page-interface, which represents the links in the JSP page as exit-ports. For example, the XML fragment in Example 2-2 describes an actual page, ActualSingleShippingAddressPage, of a store:

Example 2-2 ActualSingleShippingAddressPage description

```
<actual-page id="ActualSingleShippingAddressPage"
file="SingleShippingAddressDisplay.jsp"/>

<actual-page-interface id="ActualSingleShippingAddressPage.i1"
actual-page-id="ActualSingleShippingAddressPage">
    <exit-port id="ActualSingleShippingAddressPage.i1.xNext"
type="ExitPortType1"/>
</actual-page-interface>
```

In addition to JSP pages, WebSphere Commerce Flow Repository can describe non-JSP and non-HTML Web assets such as style sheets or images. These assets are represented by virtual-file components. Each virtual-file component can have one or more virtual-file-implementations. In Example 2-3, the virtual-file mechanism specifies the possible paths to the image color directory.

Example 2-3 Possible paths to the image color directory

```
<virtual-file id="vfile.color"/>
<virtual-file-implementation virtual-file-id="vfile.color"
url="images/colors/color1/" id="vfile.color1.dir"/>
```

```
<virtual-file-implementation virtual-file-id="vfile.color"
url="images/colors/color2/" id="vfile.color2.dir"/>
<virtual-file-implementation virtual-file-id="vfile.color"
url="images/colors/color3/" id="vfile.color3.dir"/>
```

The repository enables a site to be built in many different ways, because for any component there can be several available implementations. Each implementation can describe a different flow or, in the case of virtual-file components, a different style. For instance, one implementation of the StandardCheckoutSubsection component might allow for splitting the order during the checkout while another implementation might not. Only one implementation of a component can be active for a particular configuration of the store (allowing the directory path in the preceding example to be determined at run time). The choice of which implementation is active at run time is conveyed by the features aspect of the repository.

Configurable features

The aspect of the Flow Repository that accounts for most uses of WebSphere Commerce Flow is the description of a store or site's configurable features.

A feature describes the available choices at an abstract level intended to reflect what the user might think can be enabled or disabled within the store or site. Features can enable particular implementations of site components. By enabling certain features, the user has control over what site component implementations should be activated, influencing the flow of the site.

There can be a one-to-one or one-to-many mapping between a feature and a site component; in the latter case a single feature spans multiple site components. In fact, a feature is allowed not to refer to any site components at all: in this case, the feature is used simply to include or exclude portions of JSP pages. In Example 2-4, the MultipleShippingAddress feature is used to enable the MultipleShippingAddressPage implementation of the ShippingAddressPage virtual page while the SingleShippingAddress feature is used to enable the SingleShippingAddressPage implementation of the same virtual page.

Example 2-4 MultipleShippingAddress and SingleShippingAddress features

```
<virtual-page id="ShippingAddressPage"/>

<virtual-page-interface id="ShippingAddressPage.i1"
virtual-page-id="ShippingAddressPage">
  ...
</virtual-page-interface>

<!-- SingleShippingAddressPage Implementation -->
```

```
<simple-implementation id="SingleShippingAddressPage.i1.impl"
url="SingleShippingAddressView"
virtual-page-interface-id="ShippingAddressPage.i1">
  ...
</simple-implementation>

<!-- MultipleShippingAddressPage Implementation -->
<simple-implementation id="MultipleShippingAddressPage.i1.impl"
url="MultipleShippingAddressView"
virtual-page-interface-id="ShippingAddressPage.i1">
  ...
</simple-implementation>
<feature id="MultipleShippingAddress"
enables="MultipleShippingAddressPage.i1.impl"/>
<feature id="SingleShippingAddress"
enables="SingleShippingAddressPage.i1.impl"/>
```

The description of all the configurable features for a given store or site is contained in the Features.xml file located in the store or site's repository directory.

2.6.2 Custom JSP tags

There are three WebSphere Commerce Flow custom tags:

- <ifEnabled>

  This tag, along with its complement <ifDisabled>, is used to include or exclude portions of a JSP page. For example:

  ```
  <flow:ifEnabled feature="search">
     portion of JSP page related to feature search
  </flow:ifEnabled>
  ```

  In this example, the tag handler will look in the SCF to see whether it contains the feature the value of whose id attribute is `search`. If it does, the body of the ifEnabled element will be processed as usual; otherwise, the body will be skipped. The <ifDisabled> tag works in the opposite manner. The body of the element is processed if the SCF does not contain the specified feature.

- <url>

  This tag retrieves the URL to be used in a form or link. For example:

  ```
  <a href="<flow:url exitPort="port"/>">This link</a>
  ```

  In this example, the tag handler will attempt to retrieve the URL to be used for exit port from the SCF. The page containing this tag must be represented in the repository by an actual-page element. The exit-port ID used in the tag,

`port`, must be the ID of some exit-port element within an actual-page-interface element.

- <fileRef>

  This tag is used to retrieve the URL of a non-JSP or non-HTML file asset, such as a style sheet, image file, or directory. For example:

  ```
  <flow:fileRef id="vfileLogo" fileId="vfile.logo"/>
  ```

  In this example, the tag handler will attempt to retrieve the URL of the file-ref element with ID `vfile.logo` from the SCF. It will create a scripting variable, `vfileLogo`, of type String whose value will be the retrieved URL. If the id attribute is omitted, the tag handler will not create a variable and will instead put the retrieved URL onto the output stream as part of the HTML document sent back to the browser.

To use WebSphere Commerce Flow custom tags, JSP pages must import the flow tag library by means of the following tag library directive:

```
<%@ taglib uri="flow.tld" prefix="flow" %>
```

2.7 Access control concepts

WebSphere Commerce views access control as the process of verifying that users or applications have sufficient authority to access a resource. This section describes the details of several aspects of WebSphere Commerce access control.

Access control in WebSphere Commerce is accomplished using access control policies. An access control policy is a rule that describes which group of users can perform a set of actions on a set of resources. WebSphere Commerce provides a set of default access control policies. These default access control policies are specified in XML format and are designed to address many of the typical access control requirements that an e-commerce site needs. To understand the access control component of WebSphere Commerce, you must first understand the typical organizational hierarchy of an e-commerce site.

2.7.1 Organizational hierarchy

Users and organizational entities within the WebSphere Commerce member subsystem are organized into a hierarchy. This hierarchy emulates a typical organizational hierarchy, with entries for organizations and organizational units, and entries for users in the leaf nodes. The hierarchy includes an artificial organizational entity called a root organization at the top. All other organizational entities and users are descendants of this root organization. Under the root organization there can be one seller organization and several buyer

organizations; all of these organizations can have one or more suborganizations under them. A Buyer Administrator or Seller Administrator is the head of an organization, and they are responsible for maintaining their organizations. On the seller organization side, each suborganization can have one or more stores within it. Store Administrators are responsible for maintaining the stores.

Root organization

The root organization is at the top of the organizational hierarchy. A Site Administrator has superuser access to perform any operation within WebSphere Commerce. The Site Administrator installs, configures, and maintains WebSphere Commerce and its associated software and hardware. This role typically controls access and authorization (that is, creating and assigning members to the appropriate role) and manages the Web site. The Site Administrator can assign roles to users and specify the organizations for which the user plays the role. The Site Administrator must assign a password to each administrator to ensure that only authorized parties can access confidential information. This provides a way to control key responsibilities, such as updating a catalog or approving a request for quotation (RFQ).

> **Note:** Users can play roles in organizations other than their parent organization.

In a WebSphere Commerce site, there is one seller organization. In a B2B direct site, there are also one or more buyer organizations. The Site Administrator may define the access control policies of the seller organization that owns the store and the access control policies of each organization that buys from the store. In a consumer direct site, there are no buyer organizations. Business-to-consumer customers are modeled as members of the default organization.

Organizations (seller)

Both in B2B direct and consumer direct sites, the Site Administrator creates one top-level seller. Under this seller organization, other suborganizations or organization units can be created. Any of these sell-side organizational entities can own one or more stores. The Site Administrator then defines any special access control policies for a seller organization and assigns a Seller Administrator to manage that organization. The Seller Administrator registers users and assigns them different roles to fit the organization's business needs according to the access control policies pertaining to that organization.

The Seller Administrator's responsibilities are summarized as follows:

- Create suborganizations that can own stores. Optionally, define which processes within the organization require approval. (This step is required only in a B2B site.)

- Assign roles to the suborganizations.
- Create users.
- Assign roles to users.

Organizations (buyer)

In a B2B direct site, the Site Administrator creates one or more buyer organizations, based on business needs. The Site Administrator then defines any special access control policies for a buyer organization and assigns a Buyer Administrator to manage the buyer organization. The Buyer Administrator registers users and assigns them different roles to fit the organization's business needs, according to the access control policies pertaining to that organization.

The Buyer Administrator's responsibilities are summarized as follows:

- Create and administer the suborganizations within the buyer organization. Optionally, define which processes within the organization require approval. (This step is required only in a B2B direct site.)
- Assign roles to the suborganizations.
- Create users.
- Assign roles to users.

> **Note:** The Site Administrator can modify and manage the access control policies of the buyer organization if appropriate.

2.7.2 Roles

As mentioned above, WebSphere Commerce provides default sets of roles. The Site Administrator must assign specific roles to every organization before assigning users to those roles. An organization can only take on roles that have been assigned to its parent organization. Similarly, a user can only take on roles that have been assigned to their parent organization.

All roles in WebSphere Commerce are tied to an organization. For example, a user plays the Product Manager role for Organization X. The parent organization of this user must also be assigned the Product Manger role for itself. The access control policies could then be set up such that this user can perform only product management operations within the context of Organization X and its suborganizations.

The default roles that come with WebSphere Commerce can be grouped into the following categories:

- Site operations
- Site and content development
- Logistics and operations
- Product management
- Sales management
- Marketing management
- Organizational management

Site operations

The following technical operations roles are supported by WebSphere Commerce:

- Site Administrator

  The Site Administrator installs, configures, and maintains WebSphere Commerce and the associated software and hardware. The Administrator responds to system warnings, alerts, and errors, and diagnoses and resolves system problems. This role typically controls access and authorization (creating and assigning members to the appropriate role), manages the Web site, monitors performance, and manages load balancing tasks. The Site Administrator may also be responsible for establishing and maintaining several server configurations for different stages of development such as testing, staging, and production. This role also handles critical system backups and resolves performance problems.

- Store Administrator

  The Store Administrator manages the store assets, and updates and publishes changes to taxes, shipping, and store information. The Store Administrator can also manage the access control policies for the organization. The Store Administrator, usually the lead on the store development team, is the only role on the team with the authority to publish a store archive (the Site Administrator can also publish a store archive). The Store Administrator is usually Web-literate and has a thorough knowledge of the store's business procedures.

Site and content development

WebSphere Commerce supports the Store Developer site and content development role.

- Store Developer

  Store Developers create JavaServer Pages (JSP) files and any necessary customized code, and can modify any of the standard functionality included with WebSphere Commerce. After a store archive has been created, Store

Developers have the authority to make changes to it manually or by using the Store Profile notebook and Tax and Shipping notebooks. They do not have the authority to publish the store archive to the WebSphere Commerce Server.

Logistics and operations

WebSphere Commerce supports the following logistics and operations management roles:

- Logistics Manager

  (B2B direct) The Logistics Manager, sometimes called the Shipping Manager, manages and negotiates bulk freight or shipping from carriers to warehouse, and to individual customers. This role is responsible for ensuring that the company uses the best shippers at the best costs to meet company strategy. Shipping is an important aspect of customer service and may be a key success factor for the online business.

- Operations Manager

  (consumer direct) This role manages order processing, ensuring that orders are properly fulfilled, payment is received, and orders are shipped. The Operations Manager can search for customer orders, view details, manage order information, and create and edit returns.

- Receiver

  The Receiver receives inventory at the fulfillment center, tracks expected inventory records and ad hoc receipts for ordered products, and receives returned products as a result of customer returns.

- Returns Administrator

  The Returns Administrator manages the disposition of returned products:

  - Lists returns
  - Lists returned products
  - Dispositions returned products

- Pick Packer

  The Pick Packer picks products from fulfillment centers and packs the products for shipping to customers. The Pick Packer also manages pick tickets and packing slips, which are used to confirm shipment of products during order fulfillment.

Product management

These product management roles are supported by WebSphere Commerce:

- Buyer (seller-side)

  The buyer purchases merchandise for sale. The buyer handles relations with vendors and suppliers, and negotiates to obtain the desired product with favorable terms for such things as delivery and payment options. The buyer may set prices. Inventory is managed by the buyer in order to determine the quantities to buy and ensure that stock is properly replenished.

- Category Manager

  The category manager manages the category hierarchy by creating, modifying, and deleting categories. The category hierarchy organizes products or services offered by the store. The Category Manager also manages products, expected inventory records, vendor information, inventory, and return reasons.

- Product Manager/Merchandising Manager

  The Business Merchandising or Consumer Direct Product Manager traces customer purchases, suggests discounts, and determines the best way to display, price, and sell products in the online store This manager performs all Category manager tasks and all Marketing manager tasks.

Sales management

The following business relationship management roles are supported by WebSphere Commerce:

- Sales Manager

  Sales managers acquire and retain customers, meet sales forecasts, provide incentives for increased customer business, contract management, set pricing terms, work with the Product Manager to establish inventory forecasts, and work with the Marketing Manager for promotions.

- Account Representative

  Working with individual accounts to build relationships and manage customer service issues, account reps may be authorized to change contract pricing, negotiate contracts, and analyze profitability by account category.

- Customer Service Supervisor

  This role has access to all customer service tasks. The Customer Service Supervisor manages customer inquiries (such as customer registration, orders, returns, and auctions) and has authority to complete tasks that cannot be accessed by a Customer Service Representative, such as approving system-denied returns records, and contacting customers regarding payment exceptions (such as credit card authorization failures).

- Customer Service Representative

  No matter how well an online business is designed to provide a customer with self-service features, there will be some types of customers or occasions that require personal contact. Most online businesses provide an e-mail address, fax, or telephone number for the customer to obtain direct service. It is the responsibility of the customer service representative to handle all inquiries from the customer.

Marketing management

WebSphere Commerce supports the marketing management role of Marketing Manager.

The Marketing Manager communicates the market strategy and brand messages to the customers. This role monitors, analyzes, and understands customer behavior. In addition, the marketing manager creates or modifies customer profiles for targeted selling, and creates and manages campaigns and promotions. Campaign event planning can be handled by a team comprising the Merchant, Marketing Manager, and Merchandising Manager.

Organizational management

WebSphere Commerce supports the following organizational management roles:

- Seller Administrator

  The Seller Administrator manages the information for the selling organization. Seller administrators create and administer the suborganizations within the selling organization and the various users in the selling organization, including the assignment of the appropriate business roles.

- Buyer Administrator

  The Buyer Administrator manages the information for the buying organization. They create and administer the suborganizations within the buying organization and manage the various users including approving users as buyers. Other buy-side roles such as buyer approvers and additional buyer organization administrators may be created and managed.

- Buyer Approver

  This is an individual in the buying organization who approves orders made by buyers before the order is submitted for purchase with the seller.

2.7.3 Access control policy

An access control policy authorizes a group of users to perform a set of actions on a set of resources within WebSphere Commerce. Unless authorized through one or more access control policies, users have no access to any functions of the

system. To understand access control policies you must understand four main concepts: users, actions, resources, and relationships. Users are the people who use the system. Resources are objects in the system that are to be protected. Actions are the activities that users can perform on the resources. Relationships are optional conditions that exist between users and resources.

Elements of an access control policy

An access control policy consists of four elements:

Access group The group of users to which the policy applies.

Action group A group of actions performed by the user on resources.

Resource group The resources controlled by the policy. A resource group may include business objects such as contract or order, or a set of related commands such as all of the commands that users of a particular role can perform.

Relationship (Optional) Each resource class can have a set of relationships associated with it. Each resource can have a set of users that fulfill each relationship. For example, a policy could specify that only the creator of an order can modify it. In this case, the relationship would be creator, and it is between the user and the order resource.

Access control policy concepts

Access control policies grant users access to your site. Unless they are authorized to perform their responsibilities through one or more access control policies, users have no access to any of your site's functions.

Each access control policy takes the following form:

```
AccessControlPolicy [AccessGroup,ActionGroup,ResourceGroup,Relationship]
```

The elements in the access control policy specify that a user belonging to a specific access group is permitted to perform actions in the specified action group on resources belonging to the specified resource group, as long as the user satisfies a particular relationship with respect to the resource. The relationship is specified only when needed. For example, [AllUsers,UpdateDoc,doc,creator] specifies that all users can update a document if they are the creator of the document.

The following sections describe conceptual information and terminology associated with access control.

Member groups

The Member subsystem in WebSphere Commerce enables you to create member groups, which are groups of users categorized for various business reasons. The groupings can be used for many purposes, such as access control purposes, approval purposes, and marketing purposes such as calculating discounts and prices, and displaying products. A member group of type Access Group (-2) is for access control purposes, while a member group of type User Group (-1) is for general use. A member group is associated with member group types in the MBRGRPUSG table.

Access groups: A member group of type Access Group (-2) is for grouping users for access control purposes. An access group, one element of an access control policy. is a group of users defined specifically for access control purposes. The criteria for membership in an access group is usually based on roles, the organization to which the user belongs, or the user's registration status. For example, the access group called Buyer Administrators is a group whose users each play the role of Buyer Administrator.

WebSphere Commerce includes several default roles, and corresponding to each role is a default access group that implicitly references that role. Roles can be used as attributes to add users to an access group based on the type of activities they perform in the site. For example, by default there is a role called Seller Administrator and a corresponding access group called Seller Administrators. A Site Administrator uses the WebSphere Commerce Administration Console to create, maintain, and delete access groups for a site. A Buyer Administrator or a Seller Administrator uses the WebSphere Commerce Organization Administration Console to assign roles to users or to explicitly assign users to access groups. Access groups can be implicit, explicit, or both.

An *implicit access group* is defined by a set of criteria. Anyone who satisfies the criteria is a member of the group. The criteria are usually based on a user's roles, parent organization, or registration status. The implicit conditions that define membership in a member group are in the CONDITIONS column of the MBRGRP table. Using implicit access groups that specify the attributes of users makes it easy to authorize access to similar users without having to explicitly assign and unassign individual users. It also eliminates the need to update the members of a group when a user's attributes change. A simple criterion for an access group is to include everyone who has been assigned a specific role, regardless for which organization the user plays the role. A more complex criterion would be to specify that only users that play one of a possible set of roles for a particular organization would belong to the access group.

It is possible to explicitly add or remove a user from a member group. Both of these explicit specifications can be done using the MBRGRPMBR table. An *explicit access group* contains explicitly assigned users who may or may not

share common attributes. This also enables you to exclude individuals whom you want to exclude from an implicitly defined group, even though they satisfy the conditions for inclusion.

User groups: A member group of type User Group (-1) is a collection of users, defined by the merchant, who share a common interest. User groups are similar to clubs that are offered by large stores for their frequent or preferred customers. Being part of a user group can entitle customers to discounts or other bonuses for purchasing products. For example, if market research shows that senior customers repeatedly purchase travel books and luggage, you can assign these customers to a member group called Seniors' Travel Club. Likewise, you can create a user group to reward frequent customers for their business.

Actions

Generally, an action is an operation that is performed on a resource. In role-based policies for controller commands, the action is Execute and the resource is the command being executed. In role-based policies for Views, the action is the name of the view; `com.ibm.commerce.commands.ViewCommand` is the resource. For resource-level access control, actions typically map to WebSphere Commerce commands, and the resource is usually the remote interface of a protected EJB™ (Enterprise JavaBean). For example, the controller command `com.ibm.commerce.order.commands.OrderCancelCmd` operates on the com.ibm.commerce.order.objects.Order resource. The Display action is used to activate data bean resources.

The WebSphere Commerce Administration Console can be used by a Site Administrator to associate existing actions with action groups but not for creating new actions. New actions can be created by defining them in an XML file and then loading them to the database. Actions are stored in the ACACTION table.

Action groups

Action groups are groups of related actions. An example of an action group is the AccountManage group that includes the following commands:

- `com.ibm.commerce.account.commands.AccountDeleteCmd`
- `com.ibm.commerce.account.commands.AccountSaveCmd`

Only the Site Administrator can create, update, and delete action groups. This can be done from the WebSphere Commerce Administration Console and through XML. Action groups are stored in the ACACTGRP table. Actions are associated with action groups in the ACACTACTGP table.

Resource category

Resource category refers to a class of resources that need to be protected by access control. Resources must implement the Protectable interface information.

Resource categories are Java classes such as order, RFQ, and auction. Resources are the instances of these classes. For example, Auction1 created by Auction Administrator A is one resource; Auction2 created by Auction Administrator B is another resource. These two resources belong to the resource category: auction.

Resource categories are defined in the ACRESCGRY table and for convenience are sometimes referred to as resources. A Site Administrator can associate existing resource categories with resource groups using the WebSphere Commerce Administration Console. New resource categories can be created using XML.

Resources

Resources are any objects in the system that need to be protected. For example, RFQs, auctions, users, and orders are some of the resources in WebSphere Commerce that need to be protected. Each resource has an owner. The ownership of the resource is used to determine which access control policies apply to it. Access control policies have an owner, which is an organizational entity. A policy is applied only to resources that are owned by the same organizational entity that owns the policy. Policies that are owned by ancestor organizational entities are also applied to the resource.

Controller command resources: For role-based access control for controller commands, the policy is structured such that the Execute action is being performed on the controller command resource. These policies are intended to restrict the execution of controller commands to users with a specified role. The access group for these policies is usually those with a single role, such as Product Managers (those with the Product Manager role). The resource group would be the set of controller commands that a product manager can execute.

While enforcing role-based access control on a controller command, the owner of the command must be determined. This is done by calling the getOwner() method on the command if it has been implemented. Usually this method is not implemented, so WebSphere Commerce Runtime will evaluate it by doing one of the following:

- Use the organization that owns the store that is currently in the command context.
- If there is no store in the command context, use the Root Organization as the owner.

Data bean resources: Not all data beans require protection. Within the existing WebSphere Commerce application, data beans that require protection already implement the required access control. The question of what to protect comes into play when you create new data beans. Deciding which resources to protect

depends on your application. A data bean should be protected (directly or indirectly) if the information to be displayed is not sufficiently protected by the role-based access control on the view that corresponds to the JSP that contains the data bean. If a data bean should be protected and can exist on its own, it should be directly protected. If the existence of a data bean depends on the existence of another data bean, then it should delegate to the other data bean for protection. An example of a data bean that would be directly protected is the Order data bean. An example of a data bean that would be indirectly protected is the OrderItem data bean, as it cannot exist without an data bean. Refer to the WebSphere Commerce Programmer's Guide for more information about how to protect the data bean resource.

Data resources: Data resources refer to business objects that can be manipulated, such as auctions, orders, RFQs, and users. These are usually protected at the enterprise bean level, but it is possible to protect any class that implements the Protectable interface. Data resources are protected using resource-level access control checks. The common way to do this is by returning data resources in the getResources() method of a controller or task command. For more information, see the WebSphere Commerce Programmer's Guide.

Resource groups

A resource group identifies a set of related resources. A resource group can include business objects such as a contract or a set of related commands. In access control, resource groups specify the resources to which the access control policy authorizes access.

Resource groups are defined in the ACRESGRP table. Site Administrators can manage resource groups and associate resources with resource groups using the WebSphere Commerce Administration Console, or by using XML.

Implicit resource groups: Implicit resource groups define resources that match a certain set of attributes. One of these attributes must be the Java class name. Other attributes may include status, store ID, price, and so on. For example, you could create an implicit resource group that includes all orders that have pending status (ORDERS.STATUS=P). Implicit resource groups are usually used for grouping resources that will be used in resource-level policies when the resources share a common attribute beyond the Java class name.

Implicit resource groups are defined using the CONDITIONS column of the ACRESGRP table. Simple implicit resource groups can be created using the WebSphere Commerce Administration Console. Increasingly complex groups can be created using XML.

Explicit resource groups: Explicit resource groups are specified by associating one or more resource categories to a resource group. This association is done in

the ACRESGPRES table. Adding a resource category to a group explicitly, by listing its Java class name, enables you to group individual resources that might not necessarily share common attributes.

Relationships

Each resource may have some kind of relationship associated with it, and a set of members that fulfill each relationship. For example, all resources have a relationship of owner, which is fulfilled by the owner of the resource. Other relationships can include recipients of documents and the creator of an order. These resource relationships are important in determining who can perform certain actions on a particular instance of a resource. For example, the creator of a document may not be able to delete it, but perhaps an auditor may. Similarly, a reviewer may only be able to read and approve a document, but not forward it or perform other operations.

Relationships are stored in the ACRELATION table, and, optionally, are specified in an access control policy using the ACRELATION_ID column of the ACPOLICY table. When evaluating a policy that requires the fulfillment of a relationship between the user and the resource, the fulfills(Long Member, String relationship) method on the resource will be called to evaluate it. When compared to relationship groups, these relationships are sometimes referred to as *simple relationships*.

Relationship groups: Access control policies can specify that a user must fulfill a particular relationship with respect to the resource being accessed, or they can specify that a user must fulfill the conditions specified in a relationship group. In most cases, a relationship is sufficient. However, if more complex relationships are needed, a relationship group can be used instead. A relationship group enables you to specify multiple relationships and also a chain of relationships. Both of these are done using a relationship chain construct. A relationship chain is a construct that can express a simple relationship (directly between a user and the resource), but can also be used to express a series of relationships between the user and the resource. For example, to express that a user must have a role in an organization that has a relationship (other than the owner relationship) with the resource, you must use a relationship group. In this example, there is a role relationship between the user and the organization, and a relationship between the organization and the resource.

Types of access control policies

There are two types of access control policies:

- Standard policies
- Template policies

Standard policies have a fixed owner. For example, if a standard policy is owned by Seller Organization, it will apply only to resources that are owned by Seller Organization and to resources that are owned by its descendant organizational entities, if they exist. The Root Organization is the ancestor organization of all other organizations in WebSphere Commerce, so any policy that is owned by Root Organization (member ID = -2001), by definition applies to all resources in the site. Thus, standard policies that are owned by the Root Organization are sometimes referred to as *site-level policies.*

Standard policies that are not owned by Root Organization are referred to as *organizational-level policies*, because they do not apply site-wide but only to the resources that are owned by the policy owner or by any of its descendant organizational entities. Store administrators can manage the policies for their own organizational entity and its descendant organizational entities. Site administrators can modify all policies.

Template policies have a dynamic owner. Template policies apply dynamically to the organizational entity that owns the resource and its ancestor organizational entities. For example, consider that there are 10 organizations under Root Organization, and that each one wants to ensure that Store Administrators can modify only resources that are owned by the Organization for which they play their role.

There are two ways to set this up:

- Have one template policy that will dynamically apply to any of the 10 organizations, depending on the resource that is being accessed. The criteria for the access group in the template policy can also be dynamic. For example, if a user is trying to access a resource owned by Organization 3, the owner of the template policy will dynamically change to Organization 3, and the access group will also dynamically scope itself to Organization 3 (that is, the user must play the role of Store Administrator for Organization 3).
- Have 10 policies, each one owned by one of the 10 organizations. The access group for Organization 1 would specify that the user must play the Store Administrator role for Organization 1. The access group for Organization 2 would specify that the user must play the Store Administrator role for Organization 2, and so on.

The advantage of the first solution is that there is only one physical copy of the policy, but 10 logical copies. Template policies can be managed by a site administrator.

Overriding template policies: Another feature of template policies is that they can be overridden for specified organizational entities. Going back to the example above, if an eleventh organization entity is added to the WebSphere Commerce site, but this newest organizational entity does not want the above

template policy to apply to it, there is a way to specify this: An entry must be added to the ACORGPOL table, specifying the policy ID of the template policy, and the organizational entity ID of the eleventh organization. This can also be done through the WebSphere Commerce Administration Console, when a Store Administrator deletes or updates a template policy in the context of a particular organization.

When overriding a template policy for a descendant organization of Root Organization, the template policy will still apply at the Root Organization level. If the template policy is being overridden with a more restrictive policy at the descendant organization level, you should override the template policy at the Root Organization level as well. The only way to override a template policy for the Root Organization is through the database, by running the following SQL:

```
insert into ACORGPOL (acpolicy_id, member_id) values ( (select acpolicy_id
from ACPOLICY where policyname = 'policyToOverride'), -2001)
```

2.7.4 Levels of access control

There are two broad levels of access control in WebSphere Commerce: command level (also know as role-based) and resource level (also known as instance-level).

Command-level or role-based access control

Command-level or role-based access control is coarse access control. It determines "who can do what." With role-based access control, you can specify that all users of a particular role can execute certain commands. Consider this access control policy: Sellers can execute sellers commands, in which one of the sellers commands is the `ModifyAuction` command. Role-based access control is used for controller commands and views. This type of access control does not consider the data resource that the command acts on. It only determines whether the user is allowed to execute a particular controller command or view. This level of access control is mandatory and is enforced by the Runtime. All controller commands must be protected by command-level access control. In addition, any view that can be called directly or that can be launched by a redirect from another command (in contrast to being launched by forwarding to the view) must be protected by command-level access control.

Command-level access control for controller commands: Whenever you run a controller command, an access control policy must exist that grants users the right to perform the Execute action on the command resource. The resource is the interface name of the controller command. The access group is usually geared to a single role. For example, you can specify that users with the Account Representative role can execute any command in the resource group AccountRepresentativesCmdResourceGroup.

Command-level access control for views: When a view is called directly from the URL, or is the result of a redirect from a command, it must have an access control policy. Such a policy must have the viewname specified as an action, in the ACACTION table. This action must then be associated with an action group, using the ACACTACTGP table. This action group must then be referenced in the appropriate command-level policy, in the ACPOLICY table.

Instance-level or resource-level access control

Instance-level or resource-level access control policies provide granular access control, determining who can do what command on which resources. Resource-level access control applies to commands and data beans.

Resource-level access control for commands: After the command-level access control checking has been completed, if access has been granted, then resource-level checking is done in one of the following two cases:

- The command implements getResources(). This method specifies the instances of resources that should be checked against the current action, where the command is now the action. The WebSphere Commerce Runtime enforces that the current user has access to all of the resources specified by getResources(). By default, getResources() returns null, that is, it does not perform any resource-level checking.
- The command calls checkIsAllowed(Object Resource, String Action). In cases where the command writer does not know which resources should be checked when getResources() is called by the Runtime, the command can call this checkIsAllowed() method, as needed, to determine whether the current action and resource pair are authorized. The action is usually the interface name of the current command. When this method is called, if access is denied, an exception will be thrown:

```
ECApplicationException( ECMessage._ERR_USER_AUTHORITY, ..)
```

Resource-level access control for data beans: As explained above, views are protected by command-level policies, which are usually based on roles. For example, the command-level policy may specify that a Seller Administrator has access to a specific view. It is often necessary to further ensure that the data beans on the JSP are all related to the organization for which the user plays the Seller Administrator role. This is done by having all data beans that need protection (directly or indirectly) implement the Delegator interface. These data beans delegate to a primary (independent) data bean, which in turn implements the Protectable interface. A primary data bean would delegate to itself, and therefore implement both interfaces. Then, whenever a data bean is invoked using the data bean manager's activate() method, the WebSphere Commerce Runtime will ensure that there is a policy that grants the current user the authority to perform the Display action on the primary data bean resource.

2.8 E-mail activities

E-mail activities enable you to deliver news and promotions to customers using e-mail. You can reach customers who may not have visited your site in some time, or keep regular customers up to date regarding upcoming events or products. Optionally, you may associate an e-mail activity with a campaign, which helps organize the gathered statistics into more meaningful reports.

E-mail activities are created using the e-mail activity dialog in the WebSphere Commerce Accelerator.

E-mail activities can be either pending or delivered. They are considered *pending* while being created and while awaiting delivery. Thereafter, they are considered *delivered*.

E-mail activities send a single dynamic e-mail message to multiple recipients. An activity is not sent as a single e-mail with multiple target addresses, but rather as an e-mail sent multiple times, once each to every selected target e-mail address. This eliminates the ability of a recipient to see the e-mail addresses of the other recipients, and should reduce privacy concerns.

When your Site Administrator configures e-mail activities, one of the settings is a default reply-to e-mail address. That is, an e-mail activity uses this address to populate the Reply-to e-mail address field in the E-mail activity dialog. Some sites use specific reply-to addresses to filter incoming mail appropriately, such as to the person responsible for supporting the activity or the parent campaign.

As with any kind of e-mail, delivery of e-mail sent as part of an e-mail activity is subject to failure for a number of reasons. Failure to deliver an e-mail results in a bounce-back, which is simply a case where an outgoing e-mail fails to arrive at its destination and ends up in the sender's inbox instead. Bounce-backs fall into two categories: hard and soft. A *hard* bounce-back typically indicates that the e-mail address to which you sent the message is invalid. E-mails resent to an address that has triggered a hard bounce-back will always result in a hard bounce-back. Conversely, a soft bounce-back is caused by some event or situation that is typically considered temporary. For example, if an e-mail cannot be accepted due to a restriction on the size of a customer's inbox, this is considered a soft bounce-back. Resending this message to this e-mail address at a later time may result in a successful delivery. When you create an e-mail activity, you can specify how WebSphere Commerce should handle soft bounce-backs. You have the option of having the message resent and, if so, how long after the initial send date to wait before resending.

Care should be taken in any endeavor to mass e-mail customers. There is growing concern, and in some places laws forming, around exactly what is allowable depending on the level of consent, whether there is no consent, implied

consent, or full consent. Any customer e-mail activities should ensure compliance with the latest developments in this area.

E-mail activity templates are JavaServer Pages, which define the address and subject of the e-mail in addition to the content. The templates contain data beans, which are capable of accessing the commerce database to generate dynamic content, such as the individual addresses of the target customer segment, the subject, the reply-to e-mail address, and the body of the e-mail. Any of these pieces of information can be changed dynamically according to your business needs.

Extended Sites in WebSphere Commerce

Commercial enterprises may have multiple go-to-market strategies, each of which targets a different segment of the market. Each segment of the market, and sometimes each individual customer, should be presented with a customized storefront. This presents a problem of managing an ever-growing set of business assets. The challenge is to reuse as many assets among the different storefronts as possible to minimize the management problem. Extended Sites in IBM WebSphere Commerce can provide the infrastructure that is necessary to build multiple customized storefronts while maximizing site scalability.

This chapter contains the following sections:

- Overview
- Business models and scenarios
- Implementing Extended Sites

3.1 Overview

In a complex business environment, an enterprise needs to have multiple strategies to make its products available to customers. To ensure business success, an enterprise must present many faces to the market, and each face is perceived by customers as a unique site. Some examples involve customizing the sites for distinct geographies, presenting unique sites based on branding requirements, and setting up customized sites for large customers. Each of these sites must appear unique to the customers that access it, and each site should implement business rules unique to that site. For example, different geographies may have unique legal and tax regulations.

However, for operational success, the scalability of management of this large set of sites becomes critical. While those aspects that are unique to each site, such as presentation, marketing campaigns, and catalog variations, must be maintained, it is important that aspects common to the installation be factored out into a single shared set of data. In our experience, typically from 75% to 90% of all configuration data managed by the enterprise is common to all the customized sites that must be created and maintained for marketing reasons.

This book describes how to utilize the Extended Sites capability of WebSphere Commerce to address this site scalability challenge. With this capability, the enterprise creates and manages a set of common configuration data assets that are shared across multiple storefronts. For each face that the enterprise presents to the market, you create an extended site that contains all necessary customizations to uniquely position the site for a specific market.

The Extended Sites capability provides distinct advantages over basic store modeling. Basic store modeling is when you use a standard consumer direct or B2B direct store model and create a complete set of presentation and data assets for each store within a WebSphere Commerce implementation. The advantages of the Extended Sites model include:

- Data sharing

  There is no need for the duplication of data for multiple stores. A set of catalog data can be shared across multiple stores.

- Presentation sharing

  A single set of presentation JSP files can be used for any number of stores. Changes are propagated to all stores that are sharing this asset.

- Ease of management

  Lightweight stores can be created very quickly. There is a rich set of capabilities provided to customize each individual store. See 2.6, "WebSphere Commerce flow infrastructure" on page 36.

- Scalability

  With less data and fewer assets in an Extended Sites environment compared to the same number of stores created with basic store modeling, there should be a considerable performance improvement using Extended Sites. The more stores that are built, the greater the performance improvement.

3.2 Business models and scenarios

This chapter focuses on the consumer direct and the B2B direct business models. In the consumer direct business model, an enterprise sells goods or services to the general public. In variations of this business model, the set of consumers may be restricted. For example, with employee purchase plans, the consumers are employees of a company. With the B2B direct business model, an enterprise sells to other businesses, either end users of the products or, in some cases, resellers of the products.

All enterprises are unique in their go-to-market strategies, and each selling organization creates its own unique approaches in interacting with customers. However, there are some common scenarios within these business models in which the selling enterprise needs to create multiple sites. Such scenarios include unique sites for different geographies, different brands, different markets, and for large customers.

3.2.1 Sites for different geographies

Frequently, a selling enterprise must maintain presence in multiple geographies. In the case of a multinational selling enterprise, such geographies are determined by national boundaries, state or provincial jurisdictions, or marketing and sales territories.

Consider a multinational selling enterprise that maintains presence in many countries. Typically, each country has its own regulations and peculiarities in various areas. For example, while the overall enterprise maintains a single set of goods or services, any one of the geographies may make decisions on which a subset of the products is available within its site. Such differences in the set of available products may be due to legal restrictions or marketing decisions. Other examples include tax regulations, which differ from country to country, and shipping rules, which depend on arrangements with local shipping providers.

Marketing campaigns may be targeted at specific geographies, with specific advertising or promotions offered only in selected areas. It is also possible that some marketing messages must be delivered at the enterprise level (there may be a requirement to run global campaigns that are shared by all geographies).

Even for shared assets, some aspects may need to vary. For example, product descriptions may be shared by all sites that sell the particular product. However, each geography may present these descriptions in a different set of languages. For example, in the United States, customers may choose to see the site in English or Spanish, while in Canada many sites are available in English and French. A multinational seller needs to set up sites so that the appropriate choice of languages is available in each geography.

A site set up for a particular geography must present pricing in the currency that is appropriate for the corresponding country. This involves either managing prices in multiple currencies, or dynamic currency conversion throughout the shopping or purchasing process.

3.2.2 Sites for different brands

Branded sites typically present products in a manner unique to that brand. While in some cases the set of products is largely different for each brand, many products are sold under multiple brands. However, the site must customize the presentation to suit the requirements of each brand, such as site look-and-feel, overall flow, and product display pages.

Another unique branding technique is in the marketing messages carried by the site. While in some cases a few enterprise messages may be shown by all brands, typically each brand has its own unique marketing strategy. For example, catalog upsells and cross-sells, promotions, and advertising are most likely unique to each brand.

3.2.3 Sites for different market segments

Frequently, a selling enterprise instantiates sites targeted to specific market segments. The most typical distinction is that B2B and B2C customers are addressed by different sites. In addition, within the B2B direct division, unique sites may be created for such segments as Education, Travel, Transportation, Industrial, and so on. All of these sites are based on the same set of catalog data, but each site needs to filter out the portions of the catalog that are applicable to it. As with branding, marketing campaigns and messages are typically unique to the site, but a given set of marketing messages may be common to several market segments, to a division, or to the entire enterprise.

In the B2B direct space, each site serves the needs of multiple customers. This is important in the small and medium-sized business (SMB) space, where a seller may have a very large number of customers in the same segment. Each customer may have its own customizations, such as shipping and billing options, and contractual arrangements that affect pricing or product entitlement. In many cases, common typical contracts are set up ahead of time to address the needs

of most typical customers. In such an arrangement, a customer is granted one of the predefined sets of terms and conditions, though some additions or exclusions are also applied on top of the predefined contract. In addition, a customer may negotiate special bids with unique prices, or may have entitlements to made-to-order products that are available only to that customer.

Different business customers may also need to have distinct options in the site flow. For example, some customers may require order approval, while others do not. There are variations in how purchase order numbers are handled, and occasionally a customer may want to see a logo of their company on the site when it is accessed by their employees.

3.2.4 Sites for large customers

Very large customers have unique purchasing needs. Their requirements range from having specially designed pricing and product entitlement, to having unique marketing messages and unique modifications to the site look-and-feel and presentation, and even variations in business logic. For example, large customers may require different checkout flow, supplying information unique to their company. Registration processes may differ. For example, some companies want to approve every employee who registers on the site, while others prefer a self-service process where each employee must know a company code or password to register.

Different enterprises may have different order notification needs as well. Some may want a notification of each order to be sent to a designated contact; others require notification be sent to the employee who placed the order. Access control may have to be customized to the needs of a large enterprise customer. Some enterprises allow all employees to place orders, while designated administrators may view all orders in their department. In other cases, the enterprise customer may allow employees to browse the catalog, but only procurement officers are authorized to place orders. Many variations of access control are possible, but in each case they are customized to the needs of the enterprise buyer.

Another frequent requirement of large customers is integration with their procurement systems, so that purchase orders are automatically punched into the commerce environment. Registered authorized employees can track the status of such B2B orders.

These are a few of the customizations that an enterprise customer may demand; however, these examples illustrate the overall site customization requirement. Such enterprise sites must coexist on the same infrastructure, sharing as much data and business logic as possible, so that the management of the overall operation does not become prohibitively expensive to the selling organization.

3.3 Extended Sites sar files

An Extended Sites environment is created by publishing a store archive file (.sar). This is a zipped archive file that holds all assets needed to create a store or site. It is primarily used as a vehicle for packaging and delivering stores. You only need to publish a store archive to the WebSphere Commerce server to create a functioning store or site that can be viewed, browsed, and shopped.

The WebSphere Commerce Business Edition provides store archive files that are also used to package and deliver organization structures, predefined user roles, and access control policies needed to create the environment for your store or site, as well as to package collections of assets used to create a catalog or storefront.

Table 3-1 provides a list of the store archive files that are related to Extended Sites. These files are included only in the Business Edition.

Table 3-1 Extended Sites store archive files

Store archive	Description
B2BDirectStorefrontAssetStore.sar	Contains all of the necessary assets to create a B2B direct storefront.
ConsumerDirectStorefrontAssetStore.sar	Contains all of the necessary assets to create a consumer direct storefront.
ExtendedSites.sar	Contains the organization structure, predefined user roles, and necessary access control policies to create an environment involving multiple sites. Also contains assets to create a shared catalog and seller storefronts.
ExtendedSitesCatalogAssetStore.sar	A sample store archive containing all the necessary assets to create a shared catalog.
ExtendedSitesHub.sar	Contains all of the necessary assets to create the hub site.
ExtendedSitesOrganizationStructure.sar	Contains the organization structure, predefined user roles, and necessary access control policies to create an environment involving multiple sites.
StoreDirectory.sar	Contains all of the necessary assets to create a navigable directory of all available stores in the site.

The ExtendedSites.sar file contains all of the assets included in the following store archive files:

- B2BDirectStorefrontAssetStore.sar
- ConsumerDirectStorefrontAssetStore.sar
- ExtendedSitesCatalogAssetStore.sar
- ExtendedSitesOrganizationStructure.sar

Two store archive files are included within Extended Sites that can be used to implement a hosting environment. These were included in the old HostingESites.sar file in previous versions of WebSphere Commerce Business Edition. These files are:

- ExtendedSitesHub.sar
- StoreDirectory.sar

They are not required for an Extended Sites environment but rather maintained for use in creating a hosting environment where a third party creates and maintains the environment for individual resellers to create their stores. The ExtendedSitesHub.sar provides self-service functions to store operators for the creation and management of stores. The StoreDirectory.sar provides mall-like functions for the display of a store directory and a site-level search.

3.4 ExtendedSites.sar

The ExtendedSites.sar replaces the HostingESites.sar that was included in previous versions of WebSphere Commerce Business Edition. Publishing this file creates an initial organization structure and set of access control policies to support the Extended Sites environment. It also creates the following stores that can be managed through the WebSphere Commerce Accelerator (see Chapter 10, "Manage the hub" on page 261):

- Extended Sites Hub
- Extended Sites Catalog Asset Store
- B2B Direct Storefront Asset Store
- Consumer Direct Storefront Asset Store

The following sections describe different aspects of the Extended Sites environment that are created when the ExtendedSites.sar file is published.

3.4.1 Shared assets

A major advantage of using Extended Sites is the ability to share assets among multiple stores. This reduces maintenance requirements and improves performance. See 2.3, "Store relationships" on page 23 for details on store relationships and asset sharing.

When the ExtendedSites.sar file is published, the store relationships are created as depicted in Table 3-2.

Table 3-2 Extended Sites initial store relationships

Store	Related Store	Relationship
Consumer Direct Storefront Asset Store	Catalog Asset Store	Business policy
		Catalog
		Price
B2B Direct Storefront Asset Store	Catalog Asset Store	Business policy
		Catalog
		Price

This means that any business policies that pertain to the Catalog Asset Store can be shared with the Consumer Direct Storefront Asset Store and the B2B Direct Storefront Asset Store. Catalogs and associated pricing that are created in the Catalog Asset Store can also be shared with these stores.

3.4.2 Organizations and roles

When the WebSphere Commerce instance is created, the basic organizational structure consists of a root organization and a default organization (Figure 3-1 on page 69). A user account is created with the role of Site Administrator. This user is a member of the root organization. There are five policy groups:

- Guest shopper management policy group
- Management and administration policy group
- B2B direct policy group
- Consumer direct policy group
- Common shopping policy group

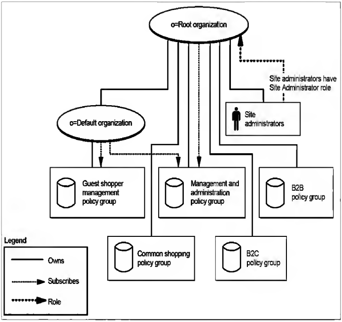


Figure 3-1 Basic access control

When the ExtendedSites.sar file is published, several new organizations are created as depicted in Figure 3-2 on page 70. There are three organizations under the Root organization:

- Extended Sites Seller organization
- Base Contracts Account organization
- Extended Sites organization

The Extended Sites organization is the parent of:

- Asset Store organization
- Extended Sites Hub organization

Also note that four new access control policies are included with Extended Sites. Three of them are subscribed to by the Asset Store organization. These policies manage access to the asset stores that are created. They are owned by the Asset Store organization.

- B2B Direct Storefront Asset Store
- Consumer Direct Storefront Asset Store
- Extended Sites Catalog Asset Store

A fourth store, the Extended Sites Hub, is owned by the Extended Sites Hub organization. This organization subscribes to the Channel Store policy group.

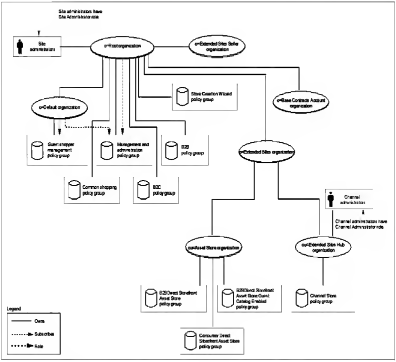


Figure 3-2 Extended Sites access control

A single administrator account is created when the Extended Sites store archive is published (extendedsitesadmin). The parent organization of this account is the Extended Sites Hub organization. extendedsitesadmin has these roles defined:

- Extended Sites Hub organization
  - Channel Manager
- Extended Sites Seller organization
  - Registered Customer
  - Channel Manager
  - Seller
- Asset Store organization
  - Category Manager
  - Operations Manager
  - Marketing Manager

3.5 Implementing Extended Sites

Extended Sites requires careful planning before deployment. This effort can be summarized in three steps:

- Define an organization structure with all assets and Extended Sites.
  - Determine go-to-market strategy.
  - Determine asset requirements.
  - Define asset stores.
  - Define Extended Sites.
  - Derive organization structure.
  - Determine deployment strategy.
- Deploy entire organization structure, assets and Extended Sites on the WebSphere Commerce instance.
- Alter Extended Sites as required.

An Extended Sites implementation can be customized by one of these means:

- Modify Extended Sites starter store archive.
- Modify component store archives.
- Modify asset store archives.

3.5.1 Modify Extended Sites starter store archive

The Extended Sites starter store archive, ExtendedSites.sar (Figure 3-3 on page 72), comes with predefined access control policies, organization structure, a set of asset stores, and a hub that shows how to quickly set up multiple stores that share all of the assets. This sample store archive can be modified to meet your requirements. The store archive is composed of XML data files that are loaded into the database and JSP files that dictate the flow of the storefronts.

For example, the following changes can be made:

- Rename the data that will be loaded into the database, such as organization names, asset store names, and the catalog structure.
- Add or change JSP files that define the store flow for your presentation asset stores.
- Add any new assets that you want to include as part of the initial store setup.
- Add the XML definition files that create the initial set of Extended Sites for your brands, geographies, segments, or divisions.

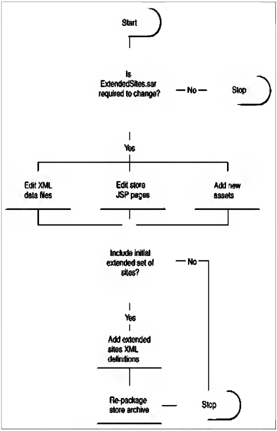


Figure 3-3 Modify ExtendedSites.sar

3.5.2 Modify component store archives

Extended sites component store archives can be used to deploy the necessary assets. The following component store archives are provided:

- ExtendedSitesOrganizationStructure.sar

  Contains the sample organization structure for a simple Extended Sites solution. XML data files can be modified to create new organizations and modify existing ones.

- ExtendedSitesHub.sar

  Sample hub that is used to manage all Extended Sites created through the Store Creation Wizard.

- B2BDirectStorefrontAssetStore.sar

  Contains a presentation asset store that has the flow of a B2B direct store.

- ConsumerDirectStorefrontAssetStore.sar

  Contains a presentation asset store that has the flow of a consumer direct store.

- ExtendedSitesCatalogAssetStore

  Contains a catalog asset store.

For example, the following changes can be made to any of these store archives (Figure 3-4 on page 74):

- Rename the data that will be loaded into the database, such as organization names, asset store names, and catalog tree.
- Add or change JSPs that define store flow for your presentation asset stores.

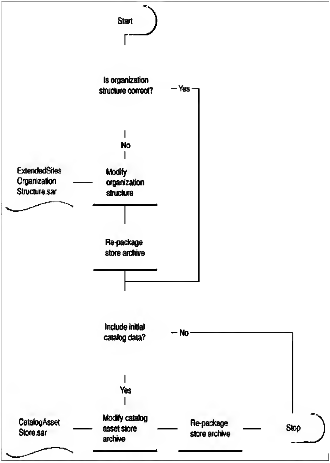


Figure 3-4 Modify component store archives

3.5.3 Modify asset store archives

Additional presentation asset stores can be created as required. For example, you may want to create an asset store per geography, per brand, or per segment to give each a unique presentation.

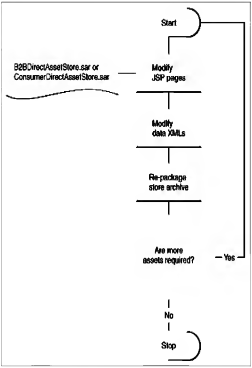


Figure 3-5 Customize asset store archives

3.6 Limitations

Several limitations must be taken into account when working with Extended Sites instead of the basic store modeling. These limitations are in the areas of:

- Sales catalogs
- Inventory
- Product Advisor

3.6.1 Sales catalogs

The Sales Catalog tool does not work well with the catalog filter. The catalog filter tool shows only the master catalog; therefore, the product set exclusion is made based on the master catalog. When building a sales catalog, you will not have visibility into which products were excluded from which stores.

The sales catalog tool does work in the Extended Sites environment. Sales catalogs can be created using the shared catalog in the catalog asset store and shared across multiple stores. Sales catalogs can also be created within individual Extended Sites. The limitation is that when building that sales catalog, the product exclusions will not be visible. This must be taken into account when using the sales catalog tool in an Extended Sites environment.

The sales catalog tool is not enabled out-of-the-box in Extended Sites. A minor change to several XML files in the Accelerator enables functionality. We decided to do this in our scenario. (See 5.3.1, "Sales catalog" on page 95 for details.)

3.6.2 Inventory

Inventory cannot be shared between multiple Extended Sites without customization. Each store draws on its own pool of inventory. Even if the same fulfillment center is shared by multiple stores, inventory is tracked per store. Although the default method of inventory management is available-to-promise (ATP), both ATP and non-ATP inventory works in Extended Sites. Some stores may be configured to be ATP, and other stores to be non-ATP.

Inventory is not tracked for Extended Sites stores out-of-the-box. A minor change is required to enable this feature. (See 5.3.2, "Inventory" on page 96.)

3.6.3 Product Advisor

The Product Advisor tool does not function in the Extended Sites environment.

3.6.4 Configuring for taxes

There is a limitation in the current version of the Accelerator when using a shared catalog. To charge sales or shipping taxes at an Extended Sites store, you must first create the proper codes and rates. This is performed through the Change Taxes option in the Store menu of the Accelerator when an Extended Sites store is being managed. You must then assign taxes to products. This is done through the Product Management tool.

The Product Management tool is accessible when managing an Extended Sites store but only for products that the current store owns. There is no access to change products that are part of a shared catalog while managing an Extended Sites store. To change aspects of a product (other than pricing) that is part of a shared catalog, you must currently be managing the Extended Sites Catalog Asset store. The problem is that while managing the Extended Sites Catalog Asset store, there is no access available to the tax rates and codes that were created under the Extended Sites store.

The only method available for loading the required database entries for taxes within products and fulfillment centers is manually. For more information about this process, see 11.2.9, "Store: Change Tax" on page 341.

3.6.5 Marketing campaigns

There are some limitations when creating global (as opposed to individual) store marketing campaigns:

- Global campaigns may not be targeted to customer segments associated with a particular account, nor can particular accounts be excluded.
- No activity sharing rules may be imposed on e-Marketing Spots.

  Activity sharing on an e-Marketing Spot is possible. (That is, activities may be scheduled on the same e-Marketing Spot at the same time, and the set of results shown will be selected from all of the activities.) Activities may be prioritized, in which case high-priority activity results will be shown more frequently than low-priority activity results. However, if an activity is scheduled on an e-Marketing Spot in the asset store, then the customer facing store itself will not be allowed to schedule anything on that e-Marketing Spot.

Create Extended Sites

In this part we describe the process that we took to build a WebSphere Commerce implementation using Extended Sites.

This part includes the following chapters:

Scenario description

This chapter describes the environment that we used in the creation of this book and lists the requirements that our scenario must satisfy to be successful.

This chapter includes the following sections:

- Environment
- Requirements
- Implementation process

4.1 Environment

The development environment utilized in the creation of this book consisted of WebSphere Studio Application Developer V5.1.2 and WebSphere Commerce Developer Business Edition V5.6.1. This environment was installed on a single workstation. For details of the installation process, see Appendix B, "WebSphere Commerce Developer implementation" on page 467.

The production environment utilized in the creation of this book was based on the software stack provided with WebSphere Commerce Business Edition V5.6.1. For details of the installation process, see Appendix A, "WebSphere Commerce implementation" on page 449.

Both cases used a single workstation with 1.5 GB of memory. This is sufficient for a development environment, but it is not recommended for a production environment. We encountered multiple cases of performance degradation. At least 2 GB should be used for even the smallest testing environments.

4.2 Requirements

This book illustrates the capabilities of an Extended Sites environment and provides guidance and best practices for implementing that environment. InWe focused on the following requirements while creating the Extended Sites environment. We cannot illustrate all possible customer scenarios, but we felt that these requirements provided the widest breadth of information:

- Two consumer direct stores with a common look-and-feel.
- One consumer direct store with a unique look-and-feel.
- All consumer direct stores sell a common set of products.
- One consumer direct store sells an additional set of products that is available only through its store.
- All shoppers can shop only in a consumer direct store.
- Two differently branded B2B direct stores with a common look-and-feel.
- Only registered B2B users can shop in one or more B2B direct stores.
- Users registered in a parent buyer organization can shop in both B2B stores.
- Users registered in a child buyer organization can shop in only one B2B store.

In completing these requirements, we illustrate a number of concepts in access control and asset sharing. This information should provide a solid foundation of knowledge in how to implement an Extended Sites environment that can be customized for any seller.

4.3 Implementation process

We begin the process with a working instance of WebSphere Commerce Business Edition V5.6.1. The remaining chapters in this part of the book provide the detailed steps that were taken:

- Chapter 5, "Publish the sar" on page 85

  Provides the steps required to publish the ExtendedSites.sar file and complete all required, and optional, site administration activities to ensure the proper operation of an Extended Sites environment.

- Chapter 6, "Create a new asset store" on page 99

  Describes how to create a new storefront asset store. This is required when you need two distinct look-and-feel storefronts. This is done by creating a copy of the ConsumerDirectStorefrontAssetStore.sar file and making customizations. This file is then published to create a new storefront asset store.

- Chapter 7, "Create organizations and users" on page 105

  We need to create additional seller organizations before creating our stores. We also need to create several buyer organizations to allow access to our B2B direct stores.

- Chapter 8, "Create and customize the stores" on page 123

  We then create the stores and individually customize them using available tools in the WebSphere Commerce Accelerator.

Publish the sar

This chapter describes the steps involved in publishing the ExtendedSites.sar file and performing administrative tasks prior to creating the stores. Before beginning the activities in this chapter, you should have completed the installation of WebSphere Commerce V5.6.1. If this has not been done, follow the instructions documented in Appendix A, "WebSphere Commerce implementation" on page 449. You should perform full database backups prior to proceeding.

This chapter contains the following sections:

- Publish procedure
- Administrative tasks
- Optional tasks

5.1 Publish procedure

The Extended Sites store archive file is used to package and deliver organization structures, predefined user roles, and access control policies necessary for creating the environment for your store or site, as well as collections of assets used to create a catalog or storefront. Publishing the ExtendedSites.sar file does not create a functional store; it creates the assets from which the stores are created and managed.

Important:

- Only one store archive at a time can be published. Concurrent publishing is not supported and may cause the publishing of both store archives to fail.
- It is not recommended that you publish more than one type of composite store archive or organization structure store archive in the same instance (for example, do not publish a ConsumerDirect.sar and BusinessIndirectReseller.sar in the same instance), or that you publish the same composite store archive or organization structure store archive more than once, as doing so may overwrite previously published data. For more information, see `Publishing a store archive` from the Administration Console - Advanced Options.
- Store archives can only be published to a single clone.

To publish the ExtendedSites.sar:

1. Ensure that you have Site Administrator access.
2. Ensure that appropriate services and servers are running.
3. (Optional) Back up your WebSphere Commerce database so that you can restore the pre-published version if necessary.
4. Open the WebSphere Commerce Administration Console by accessing this URL in a Web browser:

   `https://`*`host_name`*`:8002/adminconsole`

5. Log in as the site administrator.
6. Select the **Site** option.
7. From the Store Archives menu, select **Publish**. This opens the Store Archives page.
8. Select the ExtendedSites.sar file and click **Next**. This opens the Parameters page.
9. If you wish to publish sample data to the catalog asset store, select **Electronics** from the list box; otherwise, select **None**.

10.Click **Next**. This opens the Summary page.

11.Click **Finish** to begin the background publishing process.

12.A dialog box is displayed. Click **OK**. This displays the Publish Status page.

> **Note:** Publish could take some time so be patient. Click **Refresh** to update the Publish Status field. When the Publish Status is Successful, continue to the next step.

13.Select the publish job for ExtendedSites.sar and click **Details**. The Publish Details page is displayed.

14.At this point, you are finished publishing. Do not click the **Launch Store** button as the ExtendedSites.sar does not create a fully functional store so there is no URL to access.

15.Stay in the Site Administration Console to complete the administrative tasks.

5.2 Administrative tasks

Several administrative tasks must be performed before you start creating stores:

- Configure Scheduler jobs.
- Configure e-mail.
- Configure e-mail accounts for the hub.
- Change hub profile information.

5.2.1 Configure Scheduler jobs

Several scheduled jobs must be created at site level to take care of the order transition flow (or ATP fulfillment management) and to trigger several e-mail reports for the hosted stores. Scheduled jobs are created from the Administration Console.

The scheduled jobs that are recommended to be created for the site are:

- ExecuteSpecifiedCommandForHostedStores
  - BalancePayment
  - PayCleanup
  - ProcessBackorders
  - RAReallocate
  - ReleaseExpiredAllocations
  - ReleaseToFulfillment
- ReportsNotify

Here are brief descriptions of the jobs:

ExecuteSpecifiedCommandForHostedStores

This job accepts a parameter called commandName. The purpose of this job is to execute the command that is specified for all of the hosted stores in the site. The actual command being passed in as commandName should be able to execute by only requiring the storeId parameter.

BalancePayment

This command calls the `DoDepositCmd` task command to capture payment when the order has been shipped. This command implements the automatic payment capture function for WebSphere Commerce.

PayCleanup

This command cancels WebSphere Commerce orders with payment authorization requests that were rejected by the respective financial institutions for longer than a store-configured period of time.

ProcessBackorders

This command allocates inventory to backorders that were created when inventory was not available.

RAReallocate

(Redistribute allocations against expected inventory)

This command redistributes open Expected Inventory Records (EIR) against existing backorders. This is required to be able to predict more accurately when backordered order items will be available as EIR information is added or modified, and as previously backordered items are deleted or allocated.

ReleaseExpiredAllocations

This command returns allocated inventory back into the receipt table from a previously allocated order line item that has exceeded its expiration time limit.

ReleaseToFulfillment

This command releases allocated items on an order to fulfillment.

ReportsNotify

This job triggers several e-mail messages for the hosted stores. The e-mail messages that it triggers are: order summary report, store commerce report, store usage report, and site commerce report.

Note: E-mails can be received only if the corresponding transport and message types are configured correctly. See "Configure e-mail" on page 91 for configuration steps.

To configure the required scheduler jobs:

1. From the Site Administration Console, select **Configuration** → **Scheduler**. The Scheduler Status Display page opens (Figure 5-1).

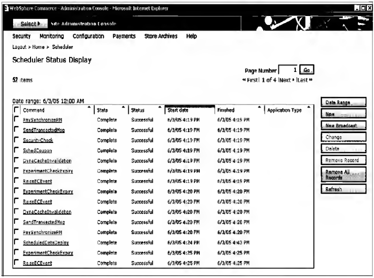


Figure 5-1 Scheduler Status Display page

2. Click New. This opens the New Scheduled Job page (Figure 5-2).

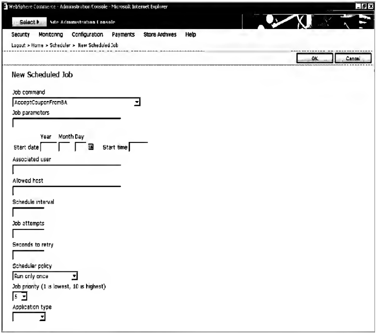


Figure 5-2 New Scheduled Job page

3. Complete the required fields for the scheduled job as defined in Table 5-1 on page 91:
   a. Find the scheduled job name in the Job command pull-down list.
   b. Enter the Job parameters if included in the table (Table 5-1 on page 91).
   c. Enter the Start date in YYYY MM DD format, or click the calendar icon to choose the date.
   d. Enter the Start time. Entering 00:00 starts the job immediately.
   e. Enter the Schedule interval in seconds.
   f. Choose the Job priority.
4. Click **OK**.

Table 5-1 Recommended job scheduling parameters

Scheduled job name	Job parameters	Start time	Interval (seconds)	Job priority
ExecuteSpecifiedCommandForHostedStores	commandName= BalancePayment	00:00	86400	1
ExecuteSpecifiedCommandForHostedStores	commandName= PayCleanup	00:00	86400	1
ExecuteSpecifiedCommandForHostedStore	commandName= ProcessBackorders	00:00	86400	8
ExecuteSpecifiedCommandForHostedStore	commandName= RAReallocate	00:00	86400	1
ExecuteSpecifiedCommandForHostedStore	commandName= ReleaseExpiredAllocations	00:00	3600	8
ExecuteSpecifiedCommandForHostedStore	commandName= ReleaseToFulfillment	00:00	3600	10
ReportsNotify		00:00	86400	1

5.2.2 Configure e-mail

This section describes the process for configuring e-mail notifications for the site. You must have a mail server set up in order to e-mail customers. Without a mail server, you cannot send e-mail notifications but the rest of the features will work.

Table 5-2 shows the e-mail notifications that must be configured for the site.

Table 5-2 E-mail notifications to be configured for the site

E-mail notifications supported	Message type
Password reset	Notification message for password reset
Authorized order	Message for an authorized order
Submission order	Message for a received order
Canceled order	Notification message for a canceled order
Shipping notification	Message for notifying the customer of an order release manifestation
Wish list	A broadcast message
Approval notification	Message to notify approvers

Table 5-3 shows e-mail notifications that must be configured for the Extended Sites Hub.

Table 5-3 E-mail notifications for the Extended Sites Hub

E-mail notifications supported	Message type
Site commerce report	Message for site commerce report
Feedback/comments	Message submitted by customer

To enable e-mail notifications, first configure the transport:

1. Open the Administration Console using a Site Administrator ID.
2. On the Administration Console Site/Store Selection page, select **Site** or **Store**.

   If you selected Store, the Select Store and Language section displays:

   a. From the Name list, select the store.
   b. From the Language pull-down list, select the language.
   c. Click **OK**. The Store Administration Console home page displays.
3. From the Configuration menu, click **Transports**. The Transport Configuration page displays.

   If the e-mail transport is *not* listed:

   a. Click **Add**. The Add Transport dialog opens.

   b. Select the check box next to the transport you want to add to the store. (You can select all transports by selecting the check box at the top-left.) If there are no transports available, then you have already added all of the transports made available by the Site Administrator.

   c. Click **Add** to add the transport, or click **Cancel** to return to the Transport Configuration page.

   If the e-mail transport *is* listed:

   a. Verify that the e-mail transport has a status of Active. If the e-mail status is inactive, select it and click **Change Status**.

   b. Select **E-mail** and click **Configure**. The Transport Configuration Parameters page displays.

   c. In the Host field, type your fully qualified mail server name (for example, `myserver.ibm.com`).

   d. In the Protocol field, type `smtp` in lowercase letters, or the protocol of your choice. Click **OK**.

Next, configure or create the message types:

1. Open the Administration Console using a Site Administrator ID.
2. On the Administration Console Site/Store Selection page select **Site** or **Store**.

   If you selected Store, the Select Store and Language section displays:

   a. From the Name list, select the store.
   b. From the Language pull-down list, select the language.
   c. Click **OK**. The Store Administration Console home page displays.
3. From the Configuration menu, click **Message Types**. The Message Type Configuration page displays.
4. Create the notification to be sent as follows:

   a. Click **New**. The Message Transport Assignment page displays.

   b. Select the message type from the Message Type pull-down list. See Table 5-2 on page 91 for the message types to use in your site/store.

   c. In the Message Severity field, type `0` to `0`.

   d. From the Transport pull-down list, select **E-mail**.

      If E-mail is not available in the list:

      i. From the Device Format pull-down list, select **Standard Device Format**.

      ii. Click **Next**. The Message Transport Assignment Parameters page displays.

      iii. Complete the fields as follows:

Host	The fully qualified name of your mail server, such as `example.ibm.com`
Protocol Type	`smtp` (you must use lowercase letters), or the protocol you are using.
Recipient	Enter a valid e-mail address. This address will be replaced by the customer's e-mail address at run time if the message is intended for a shopper.
Sender	Enter an e-mail address that you want to use as the sender of the message, such as `orders@example.ibm.com`. The address must be an e-mail address for a valid user on the mail server.
Subject	Enter the text that you want to display as the subject line of the message, such as `Your order has been accepted.`

5. Click **Finish**. The Message Type Configuration page displays.

Note: Repeat the steps for Create message type for each notification listed in the tables. Configure the transport for each of the hosted stores after they are created.

5.2.3 Configure e-mail accounts for the hub

If you intend to create e-mail activities at the hub level, you must configure the outbound and inbound mail accounts by completing the following steps:

1. Access the WebSphere Commerce Administration Console.
2. Select **Store**.
3. Select the hub store from the Store name list box (in our case, Extended Sites Hub).
4. Click **OK**.
5. Select **Configuration** → **E-mail Activiti**es.
6. Enter the following fields:
   a. Name
   b. Description
   c. Host
   d. E-mail address
   e. Account
   f. Requires authentication check box
   g. Password
   h. Port (take default of 25)
   i. Commerce host
   j. Time to start delivery
7. Click **OK**.
8. Enter the following fields for the Inbound Account:
   a. Name
   b. Description
   c. Host
   d. E-mail address
   e. Account
   f. Password
   g. Port (take default of 110)
   h. Commerce host
   i. Length of time after delivery to extract bounce information (must be greater than 0)
9. Click **OK**.

5.2.4 Change hub profile information

You may want to configure the profile information for the hub prior to creating any stores. To do this, complete the following:

1. Access the WebSphere Commerce Accelerator.
2. Select the hub from the Store name list box (in our case, Extended Sites Hub).
3. Click **OK**.
4. Select **Hub** → **Change Profile**.

   The Hub Profile notebook opens. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task.
5. In the Store name field, type the name of the hub.
6. In the Description field, type a description of the hub. This field accepts HTML tagging.
7. Click the Contact tab.
8. Make sure that you enter a valid e-mail address so that reports and notifications will be delivered.
9. If you wish to complete another task in the Store Profile notebook, click the appropriate page in the left navigation frame. If not, click **OK** to save your settings and return to the WebSphere Commerce Accelerator home page.
10. Log off of the WebSphere Commerce Accelerator.

5.3 Optional tasks

This section describes several tasks that can be performed to customize the out-of-the-box behavior of Extended Sites. These are optional and should be performed only if they are required by specific seller requirements.

5.3.1 Sales catalog

We are going to take advantage of the shared catalog feature of the Extended Sites. We would like to use sales catalogs within the stores but sales catalogs do not work well with the catalog filter tool, which shows only the master catalog view. Also, the product set exclusion is made based on the master catalog view.

Sales catalog does work in an Extended Site environment. A sales catalog can be created in the catalog asset store and shared across stores' Extended Sites; however, sales catalog tooling is not enabled out-of-the-box in Extended Sites.

To enable sales catalog tooling in WebSphere Commerce Accelerator for Extended Site, if the above limitations are not an issue:

1. Ensure that the WebSphere Commerce and Payments servers are stopped.
2. Open each of these files in a text editor:

   WC_installdir/xml/tools/common/CommerceAcceleratorCPS.xml
   WC_installdir/xml/tools/common/CommerceAcceleratorBMH.xml
   WC_installdir/xml/tools/common/CommerceAcceleratorMHS.xml

3. Search for "CatalogDesign." For example:

```
<!--
      <node  name="CatalogDesign"
       component="CatalogDesign"

url="/webapp/wcs/tools/servlet/NavCatCatalogListDialog?displayNumberOfPr
oducts=true&amp;extendedFunction=(categoryTemplate=false,
masterCatalog=false, sku=false)"
              users="catMgr"/>
-->
```

4. Uncomment the node for "CatalogDesign." For example:

```
<node  name="CatalogDesign"
       component="CatalogDesign"

url="/webapp/wcs/tools/servlet/NavCatCatalogListDialog?displayNumberOfPr
oducts=true&amp;extendedFunction=(categoryTemplate=false,
masterCatalog=false, sku=false)"
              users="catMgr"/>
```

5. Save the changes and close the files.
6. Restart the servers.

5.3.2 Inventory

Extended Sites are created with the Available to Promise (ATP) feature enabled but with inventory tracking disabled by default. To enable inventory tracking for all Extended Sites that will be created using the Store Creation Wizard:

1. Open the following file in a text editor:

   WC_installdir/xml/trading/xml/TemplateHostingContract.xml

2. Locate the `FulfillmentCenter` element.
3. Change the value of its inventoryopflags attribute from 14 to 0.
4. Save and close the file.

5.3.3 Fulfillment centers

In WebSphere Commerce Business Edition V5.6.1, a change was made to the Store Creation Wizard. Previous versions of this tool included a panel that enabled the user to create fulfillment centers for the store being created. This panel has been commented out and a fulfillment center is automatically created using the store name as the fulfillment center name.

If you would like the ability to create and name fulfillment centers through the Store Creation Wizard, uncomment this panel:

1. Open the following file in a text editor:

   WC_installdir/xml/tools/contract/StoreCreationWizard.xml

2. Locate this line and delete it:

   ```
   <!-- REMOVE THIS LINE TO ADD THE FULFILLMENT PAGE INTO THE STORE CREATION
   WIZARD
   ```

   It can be found above these lines that define the fulfillment panel:

   ```
     <panel name="fulfillmentPanel"
           url="/webapp/wcs/tools/servlet/SCWFulfillmentView"
       parameters="fromAccelerator"
           helpKey="SCW.contract.Fulfillment.Help" />
   ```

3. Locate this line and delete it:

   ```
   REMOVE THIS LINE TO ADD THE FULFILLMENT PAGE INTO THE STORE CREATION WIZARD
   -->
   ```

4. Save and close the file.
5. Restart the servers.

Create a new asset store

This chapter describes the steps that we took to create a new, customized storefront asset store.

In this chapter includes the following sections:

- Start with an existing asset store
- Create a customized asset store
- Publish the new asset store

6.1 Start with an existing asset store

You should start with an existing storefront asset store. This reduces the potential for problems and ensures that you have everything that you need to make your own working asset store. The available asset stores for Extended Sites are:

- B2BDirectStorefrontAssetStore.sar
- ConsumerDirectStorefrontAssetStore.sar

These files can be found in the following directory:

```
wc_installdir\starterstores\ExtendedSites
```

The WebSphere Commerce Business Edition ships with a number of starter stores. These stores are used as a basis for the creation of customized stores for individual WebSphere Commerce clients. The starter store that we are going to use in this task is the `ConsumerDirectStorefrontAssetStore.sar`.

Looking into the sar file, there are five directories:

- META-INF
- SAR-INF
- StoreAssetsDir
- tools
- WEB-INF

The contents of the META-INF directory need not be touched in the customization process. SAR-INF contains information about the sar file itself (what the organization of the file looks like and how it is to be unpacked). The contents of this directory normally should not be affected by customization efforts.

6.2 Create a customized asset store

Follow these steps to create your custom asset store:

1. Select either the **B2BDirectStorefrontAssetStore**.sar or the **ConsumerDirectStorefrontAssetStore**.sar. (We selected the ConsumerDirectStorefrontAssetStore.sar.)
2. Make a copy of the selected file.
3. Move it to your development workstation.
4. Unpack the store archive file into a working directory.
5. Import the assets into the development environment.
6. Modify the JSP pages as needed.

7. Modify the XML files requiring customization in the sar file.
8. Several files must be customized that contain data that identifies the store archive file and provides publishing parameters.
   a. Open the following file in a text editor:

      working_directory\WEB-INF\stores\StoreAssetsDir\data\ForeignKeys.DTD

   b. Search for lines that look like these (the values will be different if you are working with the B2B direct store):

      ```
      <!ENTITY STORE_IDENTIFIER_RPS "ConsumerDirectStorefrontAssetStore">
      <!ENTITY STORE_DIR "ConsumerDirectStorefrontAssetStore">
      ```

   c. Change the values to match your new asset store name; for example:

      ```
      <!ENTITY STORE_IDENTIFIER_RPS "CustomB2CStorefrontAssetStore">
      <!ENTITY STORE_DIR "CustomB2CStorefrontAssetStore">
      ```

   d. Save and close the file.
   e. Open the following file in a text editor:

      working_directory\WEB-INF\stores\StoreAssetsDir\data\Keys.DTD

   f. Change the value of STORE_IDENTIFIER_RPS to match the value that you entered in the previous file.
   g. Save and close the file.
9. Repackage the sar file.
10. Copy your updated sar file to the following directory:

    WC_installdir\starterstores\ExtendedSites

6.3 Publish the new asset store

Before your new asset store can be published using the Site Administration Console, it must be added to the SARRegistry.xml file. Follow these steps to complete this task:

1. Open the SARRegistry.xml file in a text editor. It can be found in:

   WC_installdir\xml\tools\devtools

2. Search for this string: `<!-- Reseller Hosting -->`

   The following entries are for the Extended Sites sar files:

   ```
      <SampleSAR fileName="ExtendedSites.sar"
   relativePath="ExtendedSites"> <view name="ResellerHosting"/>
      <view name="default"/>
   </SampleSAR>
   ```

```
    <SampleSAR fileName="ExtendedSitesOrganizationStructure.sar"
relativePath="ExtendedSites">
        <view name="ResellerHosting"/>
    </SampleSAR>
        <SampleSAR fileName="ExtendedSitesCatalogAssetStore.sar"
relativePath="ExtendedSites">
        <view name="ResellerHosting"/>
    </SampleSAR>
    <SampleSAR fileName="B2BDirectStorefrontAssetStore.sar"
relativePath="ExtendedSites">
        <view name="ResellerHosting"/>
    </SampleSAR>
    <SampleSAR fileName="ConsumerDirectStorefrontAssetStore.sar"
relativePath="ExtendedSites">
        <view name="ResellerHosting"/>
    </SampleSAR>
    <SampleSAR fileName="StoreDirectory.sar"
relativePath="ExtendedSites">
        <view name="ResellerHosting"/>
    </SampleSAR>
    <SampleSAR fileName="ExtendedSitesHub.sar"
relativePath="ExtendedSites">
        <view name="ResellerHosting"/>
    </SampleSAR>
```

3. Copy one complete SampleSAR entry and add your copy to the bottom of this section in the file.
4. Change the filename to match the file name of your new sar file (in our case, CustomB2CStorefrontAssetStore,sar).

```
    <SampleSAR fileName="CustomB2CStorefrontAssetStore.sar"
relativePath="ExtendedSites">
        <view name="ResellerHosting"/>
    </SampleSAR>
```

5. Save the file and close the text editor.
6. Open the WebSphere Commerce Administration Console, selecting the **Site** option.
7. From the Store Archives menu, select **Publish**. This opens the Store Archives page.
8. From the View list box, select **Extended sites**. You should see your new asset store archive file in the list.
9. Select it and click **Next**. This opens the Parameters page.
10. Click **Next**. This opens the Summary page.
11. Click **Finish** to begin the background publishing process.

12. You can click **Refresh** to update the Publish Status field.

13. When the Publish Status is Successful, you can log off of the Site Administration Console. Do not attempt to launch the store as no working store has been created yet!

Create organizations and users

In this chapter, we create the seller organizations and users required to support our stores. We also create several buyer organizations for our primary B2B customer.

This chapter contains the following sections:

- Overview
- Create seller organizations and users
- Create buyer organizations and buyers

7.1 Overview

In this section, we create all of the organizations and users that we need in order to create our stores. Figure 7-1 depicts the final organizational structure.

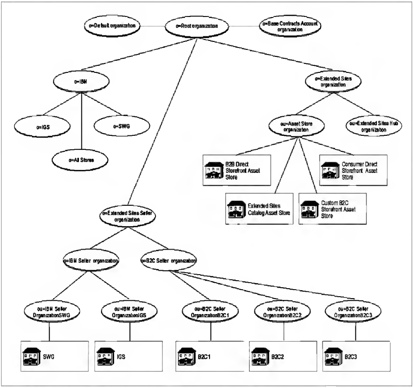


Figure 7-1 Final organizational structure

We are going to be selling to both B2B customers and B2C customers, so we have to separate the seller organizations. We create a consumer direct (B2C) seller organization and a seller administrator for that organization, and an IBM seller organization to support our B2B customer. This organization will also have a seller administrator.

The organizational units under these organizations are created automatically when each store is created.

7.2 Create seller organizations and users

To minimize the changing of menu options, we create the organizations first and then add the seller administrators.

7.2.1 Create seller organizations

We now create two new seller organizations: one for our consumer direct stores and one for our B2B direct stores:

1. Open a browser window and access the Organization Administration Console by using this link:

   `https://host_name:8004/orgadminconsole`

2. Log on as the site administrator.
3. Select **Access Management** → **Organizations**.
4. Click **New**.
5. Enter the following fields on the Details page:
   a. Short name: `B2C Seller Organization`
   b. Description
   c. Organization type: **Organization**
   d. Parent organization: `Extended Sites Seller Organization`
   e. Address
   f. Contact information

   Note: Ensure that you enter at least one valid e-mail address. We used b2bselleradmin.

6. Click **OK**.

   The Organizations page is now displayed with the new organization included in the list.

7. Click **New**.
8. Enter the following fields on the Details page:
   a. Short name: `IBM Seller Organization`
   b. Description
   c. Organization type: **Organization**
   d. Parent organization: `Extended Sites Seller Organization`
   e. Address
   f. Contact Information

   Note: Ensure that you enter at least one valid e-mail address.

9. Click **OK**.

   This displays the Organizations page, which should look similar to Figure 7-2.

Name	Parent	Status	Organization Type
Default Organization	Root Organization	Unlocked	Organization
Root Organization	None	Unlocked	Organization
Extended Sites Seller Organization	Root Organization	Unlocked	Organization
Extended Sites Organization	Root Organization	Unlocked	Organization
Asset Store Organization	Extended Sites Organization	Unlocked	Organization Unit
Base Contracts Account Organization	Root Organization	Unlocked	Organization
Extended Sites Hub Organization	Extended Sites Organization	Unlocked	Organization Unit
B2C Seller Organization	Extended Sites Seller Organization	Unlocked	Organization
IBM Seller Organization	Extended Sites Seller Organization	Unlocked	Organization

Figure 7-2 New organization list

The organizations are now created, and you must assign roles before users can be created:

1. From the Organizations page, select the **B2C Seller Organization** and click **Roles**.
2. Select the following roles from the Available Roles list:
   - Channel Manager
   - Seller Administrator
   - Seller
   - Registered Customer
   - Sales Manager
   - Category Manager
   - Returns Administrator
   - Customer Service Supervisor
   - Operations Manager
   - Pick Packer
   - Receiver
   - Marketing Manager
   - Product Manager
   - Store Administrator
   - Customer Service Representative
3. Click **Add**.
4. Click **OK**.
5. From the Organizations page, select the **IBM Seller Organization** and click **Roles**.

6. Select the following roles from the Available Roles list:
   - Channel Manager
   - Seller Administrator
   - Seller
   - Registered Customer
   - Account Representative
   - Sales Manager
   - Logistics Manager
   - Category Manager
   - Returns Administrator
   - Customer Service Supervisor
   - Operations Manager
   - Pick Packer
   - Receiver
   - Marketing Manager
   - Product Manager
   - Store Administrator
   - Customer Service Representative
7. Click **Add**.
8. Click **OK**.

   The organizations are now ready for users. Do not exit the Organization Administration Console just yet.

7.2.2 Add users

Now we create administrators for each organization as well as sellers for each store that is to be created.

To add users to the newly created organizations:

1. Select **Access Management** → **Users** from the Organization Administration Console menu. The Users page is displayed.
2. Click **New**.
3. Enter the following fields on the New User page:
   a. Logon ID: `b2cselleradmin`
   b. Name fields
   c. Password
   d. Account policy: **Administrators**
   e. Account status: **Enabled**
   f. Business Profile information
   g. Parent Organization: `B2C Seller Organization`

h. Address fields
i. Contact fields

Note: Be sure to enter a valid e-mail address.

4. Click **OK**.

   The user has been created successfully and the Users page is displayed with the new user added to the list.

5. Click **New**.
6. Enter the following fields on the New User page:

   a. Logon ID: `ibmselleradmin`
   b. Name fields
   c. Password
   d. Account policy: **Administrators**
   e. Account status: **Enabled**
   f. Business Profile information
   g. Parent Organization: `IBM Seller Organization`
   h. Address fields
   i. Contact fields

   Note: Ensure to enter a valid e-mail address.

7. Click **OK**.

   The user has been created successfully and the Users page is displayed with the new user added to the list.

Logon ID	Last Name	First Name	Organization	Role
extendedsitesadmin	extendedsitesadmin		Extended Sites Hub Organization	Registered Customer,Channel Manager,Category Manager,Operations Manager,Marketing Manager,Seller
b2cselleradmin	Administrator	B2C	B2C Seller Organization	Registered Customer
ibmselleradmin	Administrator	IBM	IBM Seller Organization	Registered Customer
siteadmin	siteadmin		Root Organization	Site Administrator

Figure 7-3 New user list

Note that each newly created user has a default role of Registered Customer. We now add roles to the users:

1. Select **b2cselleradmin** and click **Roles**. The Roles page is displayed.
2. Select **B2C Seller Organization** from the Select organization list box.

3. Add roles to this user:
   a. Select **Seller Administrator** from the Role list box.
   b. Click **Add**.
   c. Select **Seller** from the Role list box.
   d. Click **Add**.
   e. Select **Store Administrator** from the Role list box.
   f. Click **Add**.
4. Click **OK**.
5. Select **ibmselleradmin** and click **Roles**. The Roles page is displayed.
6. Select **IBM Seller Organization** from the Select organization list box.
7. Add roles to this user:
   a. Select **Seller Administrator** from the Role list box.
   b. Click **Add**.
   c. Select **Seller** from the Role list box.
   d. Click **Add**.
   e. Select **Store Administrator** from the Role list box.
   f. Click **Add**.
8. Click **OK**.
9. Log off of the Organization Administration Console.
10. Close the browser window.

Note: These new users will have the ability to manage their organizations. They will have to come back later and add sellers for each of the stores that are created.

7.3 Create buyer organizations and buyers

We now create a buying organization for our major customer, IBM. This buyer organization will have two suborganizations under it: one for the Software Group and one for Global Services. Each organization will have a buyer approver created.

Note: When creating multi-level buyer organizations, ensure that you do not define any as organizational units. The registration process does not allow buyers to register under an organizational unit.

In our case, a buyer goes to either store and clicks **Register User**. This presents a data entry page. One of the required fields is `Buyer Organization`. A buyer for the Software Group would enter `SWG/IBM` in this field. A buyer for Global Services would enter `IGS/IBM`. For a buyer to have access to both stores, they would enter `IBM` in this field.

7.3.1 Create buyer organizations

Now we create one new buyer organization, which has two suborganizations under it.

To create these new organizations:

1. Open a browser window and access the Organization Administration Console by using this link:

   `https://<host_name>:8004/orgadminconsole`

2. Log in as a site administrator.
3. Select **Access Management** → **Organizations**.
4. Click **New**.
5. Enter the following fields on the Details page:
   a. Short name: `IBM`
   b. Description
   c. Organization type: **Organization**
   d. Parent organization: `Root Organization`
   e. Address
   f. Contact information

   Note: Ensure that you enter at least one valid e-mail address. We used ibmbuyeradmin.

6. Click **OK**.

   The Organizations page displays showing the new organization in the list.

7. Click **New**.
8. Enter the following fields on the Details page:
   a. Short name: `SWG`
   b. Description

c. Organization type: **Organization**
d. Parent organization: `IBM`
e. Address
f. Contact information

Note: Ensure that you enter at least one valid e-mail address. We used swgbuyeradmin.

9. Click **OK**.
10. Click **New**.
11. Enter the following fields on the Details page:
    a. Short name: `IGS`
    b. Description
    c. Organization type: **Organization**
    d. Parent organization: `IBM`
    e. Address
    f. Contact information

    Note: Ensure that you enter at least one valid e-mail address. We used igsbuyeradmin.

12. Click **OK**. The Organizations page is displayed.
13. Click **New**.
14. Enter the following fields on the Details page:
    a. Short name: `All Stores`
    b. Description
    c. Organization type: **Organization**
    d. Parent organization: `IBM`
    e. Address
    f. Contact information

    Note: Ensure that you enter at least one valid e-mail address. We used igsbuyeradmin.

15. Click **OK**. The Organizations page is displayed (Figure 7-4 on page 114).

Name	Parent	Status	Organization Type
Default Organization	Root Organization	Unlocked	Organization
Root Organization	None	Unlocked	Organization
Extended Sites Seller Organization	Root Organization	Unlocked	Organization
Extended Sites Organization	Root Organization	Unlocked	Organization
Asset Store Organization	Extended Sites Organization	Unlocked	Organization Unit
Base Contracts Account Organization	Root Organization	Unlocked	Organization
Extended Sites Hub Organization	Extended Sites Organization	Unlocked	Organization Unit
B2C Seller Organization	Extended Sites Seller Organization	Unlocked	Organization
IBM Seller Organization	Extended Sites Seller Organization	Unlocked	Organization
IBM	Root Organization	Unlocked	Organization
SWG	IBM	Unlocked	Organization
IGS	IBM	Unlocked	Organization
All Stores	IBM	Unlocked	Organization

Figure 7-4 New organizations list with buyer organizations

The organizations are now created, and roles must be assigned before users can be created:

1. From the Organizations page, select **IBM** and click **Roles**.
2. Select the following roles from the Available Roles list:
   - Buyer (buy side)
   - Buyer Approver
   - Buyer Administrator
   - Registered Customer
3. Click **Add**.
4. Click **OK**.
5. From the Organizations page, select **SWG** and click **Roles**.

   SWG is an organization within IBM so the available roles are those that were selected for IBM.
6. Click **Add All**.
7. Click **OK**.
8. From the Organizations page, select the `IGS` and click **Roles**.

   IGS is an organization within IBM so the available roles are those that were selected for IBM.
9. Click **Add All**.
10. Click **OK**.

We want buyers who self-register to get approvals from the buyer administrators.

Follow these steps to define the approvals required for the buyer organizations:

1. From the Organizations page, select **IBM** and click **Approvals**.
2. Select **User Registration Approvals** from the Available approvals list.
3. Click **Add**.
4. Click **OK**.
5. From the Organizations page, select **SWG** and click **Approvals**.
6. Select **Order Process Approvals** and **User Registration Approvals** from the Available approvals list.
7. Click **Add**.
8. Click **OK**.
9. From the Organizations page, select **SWG** and click **Approvals**.
10. Select **Order Process Approvals** and **User Registration Approvals** from the Available approvals list.
11. Click **Add**.
12. Click **OK**.
13. From the Organizations page, select **All Stores** and click **Approvals**.
14. Select **User Registration Approvals** from the Available approvals list.
15. Click **Add**.
16. Click **OK**.

> **Note:** Adding the Order Process Approvals to the approvals list requires that each time an order is placed, an approval will be required by a Buyer Approver. The order will be held until the approval is complete.
>
> An e-mail will be generated to the Buyer Approver indicating that an order is ready for approval so ensure that valid e-mail addresses are entered.

The organizations are now ready for users. Do not exit the Organization Administration Console just yet.

7.3.2 Add buyer administrators

We now create buyer administrators for each organization and organizational unit in the IBM buyer organization. To add users to the newly created organizations:

1. Select **Access Management** → **Users** from the Organization Administration Console menu. The Users page is displayed.
2. Click **New**.
3. Enter the following fields on the New User page:
   a. Logon ID: `ibmbuyeradmin`
   b. Name fields
   c. Password
   d. Account policy: **Shoppers**
   e. Account status: **Enabled**
   f. Business Profile information
   g. Parent Organization: `IBM`
   h. Address fields
   i. Contact fields

   Note: Be sure to enter a valid e-mail address. This user will receive approval notifications.

4. Click **OK**.

   The user has been created successfully and the Users page is displayed with the new user added to the list.

5. Click **New**.
6. Enter the following fields on the New User page:
   a. Logon ID: `swgbuyeradmin`
   b. Name fields
   c. Password
   d. Account policy: **Shoppers**
   e. Account status: **Enabled**
   f. Business Profile information
   g. Parent Organization: `SWG`
   h. Address fields
   i. Contact fields

   Note: Be sure to enter a valid e-mail address. This user will receive approval notifications.

7. Click **OK**.

The user has been created successfully and the Users page is displayed with the new user added to the list.

8. Click **New**.
9. Enter the following fields on the New User page:
   a. Logon ID: `igsbuyeradmin`
   b. Name fields
   c. Password
   d. Account policy: **Shoppers**
   e. Account status: **Enabled**
   f. Business Profile information
   g. Parent Organization: `IGS`
   h. Address fields
   i. Contact fields

   Note: Be sure to enter a valid e-mail address. This user will receive approval notifications.

10. Click **OK**.

    The user has been created successfully and the Users page is displayed with the new user added to the list.
11. Click **New**.
12. Enter the following fields on the New User page:
    a. Logon ID: `allstoresbuyeradmin`
    b. name fields
    c. Password
    d. Account policy: **Shoppers**
    e. Account status: **Enabled**
    f. Business Profile information
    g. Parent Organization: `All Stores`
    h. Address fields
    i. Contact fields

    Note: Be sure to enter a valid e-mail address. This user will receive approval notifications.

13. Click **OK**.

    The user has been created successfully and the Users page is displayed with the new user added to the list.

Each newly created user has no default roles assigned, so now we add roles to the users:

1. Select **ibmbuyeradmin** and click **Roles**. The Roles page is displayed.
2. Select **IBM** from the Select organization list box.
3. Add roles to this user:
   a. Select **Buyer (buy side)** from the Role list box.
   b. Click **Add**.
   c. Select **Buyer Administrator** from the Role list box.
   d. Click **Add**.
   e. Select **Buyer Approver** from the Role list box.
   f. Click **Add**.
   g. Select **Organization Participant** from the Role list box.
   h. Click **Add**.
4. Select **IBM Seller Organization** from the Select organization list box.
5. Select **Registered Customer** from the Role list box.
6. Click **Add**.
7. Click **OK**.
8. Select **swgbuyeradmin** and click **Roles**. The Roles page is displayed.
9. Select **SWG** from the Select organization list box.
10. Add roles to this user:
    a. Select **Buyer (buy side)** from the Role list box.
11. Click **Add**.
    b. Select **Buyer Administrator** from the Role list box.
    c. Click **Add**.
    d. Select **Buyer Approver** from the Role list box.
    e. Click **Add**.
    f. Select **Organization Participant** from the Role list box.
    g. Click **Add**.
12. Select **IBM Seller Organization** from the Select organization list box.
13. Select **Registered Customer** from the Role list box.
14. Click **Add**.
15. Click **OK**.

16.Select **igsbuyeradmin** and click **Roles**. The Roles page is displayed.

17.Select **IGS** from the Select organization list box.

18.Add roles to this user:

a. Select **Buyer (buy side)** from the Role list box.
b. Click **Add**.
c. Select **Buyer Administrator** from the Role list box.
d. Click **Add**.
e. Select **Buyer Approver** from the Role list box.
f. Click **Add**.
g. Select **Organization Participant** from the Role list box.
h. Click **Add**.

19.Select **IBM Seller Organization** from the Select organization list box.

20.Select **Registered Customer** from the Role list box.

21.Click **Add**.

22.Click **OK**.

23.Select **allstoresbuyeradmin** and click **Roles**. The Roles page is displayed.

24.Select **All Stores** from the Select organization list box.

25.Add roles to this user:

a. Select **Buyer Administrator** from the Role list box.
b. Click **Add**.
c. Select **Buyer Approver** from the Role list box.
d. Click **Add**.
e. Select **Organization Participant** from the Role list box.
f. Click **Add**.

26.Select **IBM Seller Organization** from the Select organization list box.

27.Select **Registered Customer** from the Role list box.

28.Click **Add**.

29.Click **OK**. The User page is displayed (Figure 7-5 on page 120).

Logon ID	Last Name	First Name	Organization	Role
extendedsitesadmin	extendedsitesadmin		Extended Sites Hub Organization	Registered Customer,Channel Manager,Category Manager,Operations Manager,Marketing Manager,Seller
b2cselleradmin	Admin	B2C	B2C Seller Organization	Registered Customer,Seller Administrator,Store Administrator
ibmselleradmin	Admin	IBM	IBM Seller Organization	Registered Customer,Seller Administrator,Store Administrator
ibmbuyeradmin	Admin	IBM	IBM	Organization Participant,Registered Customer,Buye (buy-side),Buyer Approver,Buyer Administrator
swgbuyeradmin	Admin	SWG	SWG	Organization Participant,Registered Customer,Buye (buy-side),Buyer Approver,Buyer Administrator
igsbuyeradmin	Admin	IGS	IGS	Organization Participant,Registered Customer,Buye (buy-side),Buyer Approver,Buyer Administrator
allstoresbuyeradmin	Admin	All Stores	All Stores	Organization Participant,Registered Customer,Buye (buy-side),Buyer Approver,Buyer Administrator
siteadmin	siteadmin		Root Organization	Site Administrator

Figure 7-5 New user list with buyer administrators

7.3.3 Add buyer organizations to store member groups

When a buyer organization is registered through a particular store, that organization is automatically added to that store's member group. We created our buyer organizations through the Organization Administration Console. Now we have to complete the following steps to create accounts and contracts at our B2B direct stores for the buyer organizations.

1. Open a DB2 command window.
2. Connect to the WebSphere Commerce database.
3. Issue this command once for each Extended Sites B2B direct store:

```
db2 select mbrgrp_id from mbrgrp where mbrgrpname =
'RegisteredCustomers' and owner_id = (select member_id from storeent
where identifier = '<store identifier>')
```

   Our store identifiers are SWG and IGS.

4. Record the results.
5. Issue this command once for each buyer organization:

```
db2 select orgentity_id from orgentity where orgentityname = '<buyer
organization name>'
```

   Our buyer organizations are IBM, SWG, and IGS.

6. Record the results.

7. Create entries in the MBRGRPMBR table for each required combination of store and buyer organization.

   Note: This creates a business account in each store for IBM and a contract for the suborganization.

8. We issued the following **insert** command four times: to make the buyer organizations of IBM and SWG part of the Registered Customer member group for the SWG store, and to make the buyer organizations of IBM and IGS part of the Registered Customer member group for the IGS store.

   The syntax for the insert command is:

   ```
   db2 insert into mbrgrpmbr (member_id, mbrgrp_id) values (<buyer org>,
   <store>)
   ```

9. Make sure that you commit the changes when you are finished.

10. Close the DB2 command window.

7.3.4 Add buyers

This is done after the stores are created. The buyers go to their respective stores and register. The buyer approvers then approve the registrations so that the buyers will have access to the stores.

Create and customize the stores

In this chapter, we create and customize our stores. After some administrative tasks are completed, we will be ready to open them for business.

This chapter contains the following sections:

- Create stores
- Customize the B2C1 store
- Customize the B2C2 store
- Customize the B2C3 store
- Customize the SWG store
- Customize the IGS store
- Set up WebSphere Commerce Payments
- Register buyers (B2B only)

8.1 Create stores

We have three consumer direct stores to create: two stores will be based on the ConsumerDirectStorefrontAssetStore and one is will be based on our new CustomB2CStorefrontAssetStore. After we create the consumer direct stores, we will create two B2B direct stores and perform some housekeeping activities before we start our customizations.

8.1.1 Create stores with the ConsumerDirectStorefrontAssetStore

This section describes the steps required to create an Extended Site based on the Consumer Direct Storefront Asset Store:

1. Access the WebSphere Commerce Accelerator.
2. Log on as the `extendedsitesadmin`.
3. Select **Extended Sites Hub** from the Store name list box.
4. Click **OK**.
5. Select **Extended Sites** → **New Store** to open the Store Creation wizard.

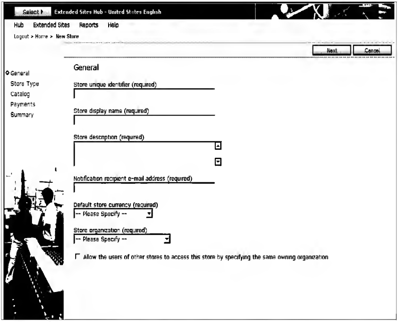


Figure 8-1 Store Creation Wizard - General page

6. Complete the fields on the page:
   - Store unique name: `B2C1`
   - Store display name: `B2C1`
   - Store description
   - Notification recipient e-mail address (must be a valid e-mail address)
   - Default store currency: **US Dollar**
   - Store organization: **B2C Seller Organization**
   - Click **Next**.
7. Select **ConsumerDirectStorefrontAssetStore** from the Store type list box.
8. Click **Next**.
9. We use the shared catalog from the Catalog Asset Store that was created when we published the ExtendedSites.sar file. Select **Extended Sites Catalog Asset Store** from the Catalog list box.
10. Click **Next** to display the Payments page.

Note: Ensure that WebSphere Commerce Payments is running.

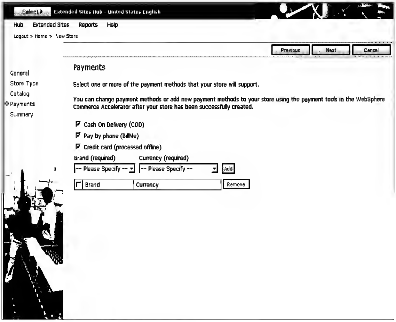


Figure 8-2 Store Creation Wizard - Payments page

11.Select payment options for the store. If Credit card is selected, the Brand and Currency list boxes are displayed. For each brand and currency combination required at the store, select the brand, select the currency, and click **Add**.

12.Click **Next** when complete. The Store creation summary page is displayed.

13.Click **Finish** after reviewing the contents of the page.

14.The Store Creation Confirmation page is displayed. When the process is complete, click **Bookmark Store** and **Close**.

> **Note:** The store is created in a Closed state. We will leave it closed for now to perform some customizations prior to opening it for business.

To create the second store, repeat the previous process from Step 5 on page 124. In Step 6 on page 125, enter `B2C2` for the store name. You will still enter the store organization as `B2C Seller Organization`. Complete the remaining steps exactly as done with B2C1.

8.1.2 Create a store with the CustomB2CStorefrontAssetStore

This store will be created with the Store Creation Wizard just like the other stores. Enter these values in the process:

Store unique name	B2C3
Store organization	B2C Seller Organization
Store type	CustomB2CStorefrontAssetStore
Catalog	Extended Sites Catalog Asset Store

8.1.3 Create stores with the B2BDirectStorefrontAssetStore

Create two B2B direct stores using the Store Creation Wizard. The process is the same for each.

The values entered for the first store were:

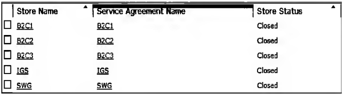
Store unique name	SWG
Store organization	IBM Seller Organization
Store type	B2BDirectStorefrontAssetStore
Catalog	Extended Sites Catalog Asset Store

The values entered for the second store were:

Store unique name	IGS
Store organization	IBM Seller Organization
Store type	B2BDirectStorefrontAssetStore
Catalog	Extended Sites Catalog Asset Store

8.1.4 Store summary

At this point, all of our planned stores have been created. The View Stores page should look similar to Figure 8-3.



Store Name	Service Agreement Name	Store Status
B2C1	B2C1	Closed
B2C2	B2C2	Closed
B2C3	B2C3	Closed
IGS	IGS	Closed
SWG	SWG	Closed

Figure 8-3 View stores

Looking back to 2.3, "Store relationships" on page 23, Table 8-1 shows what store relationships have been defined.

Table 8-1 Store relationships

Store	Related store	Relationship
Consumer Direct Storefront Asset Store	Extended Sites Catalog Asset Store	Business Policy
		Catalog
		Price
B2B Direct Storefront Asset Store	Extended Sites Catalog Asset Store	Business Policy
		Catalog
		Price
Custom Consumer Direct Storefront Asset Store	Extended Sites Catalog Asset Store	Business Policy
		Catalog
		Price

Store	Related store	Relationship
B2C1 and B2C2	Extended Sites Catalog Asset Store	Business Policy
		Catalog
		Price
		Store Item
		Currency Conversion
		Currency Format
		Supported Currency
		Counter Value Currency
		Measurement Format
	Consumer Direct Storefront Asset Store	Business Policy
		Tax
		Campaigns
		Command
		Segmentation
		URL
		View
		Store Item
		Property Files
		Promotions Relationship

Store	Related store	Relationship
B2C3	Extended Sites Catalog Asset Store	Business Policy
		Catalog
		Price
		Store Item
		Currency Conversion
		Currency Format
		Supported Currency
		Counter Value Currency
		Measurement Format
	Custom Consumer Direct Storefront Asset Store	Business Policy
		Tax
		Campaigns
		Command
		Segmentation
		URL
		View
		Store Item
		Property Files
		Promotions Relationship

Store	Related store	Relationship
SWG and IGS	Extended Sites Catalog Asset Store	Business Policy
		Catalog
		Price
		Store Item
		Currency Conversion
		Currency Format
		Supported Currency
		Counter Value Currency
		Measurement Format
	B2B Direct Storefront Asset Store	Business Policy
		Tax
		Campaigns
		Command
		Segmentation
		URL
		View
		Store Item
		Property Files
		Promotions Relationship

8.1.5 Housekeeping activities

The following activities are required to ensure proper functioning of the WebSphere Commerce implementation. Perform them in the order in which they appear. The first thing to do is to properly log off of the WebSphere Commerce Accelerator and ensure that the commerce and payment servers are stopped.

Regen the WAS plug-in

To regen the WAS plug-in:

1. Ensure that IBM WebSphere Application Server V5 - server1 is started by checking the Services panel. If it is not started, start it by right-clicking the name and selecting **Start**.
2. Open the WebSphere Administrative Console by selecting **Programs** → **IBM WebSphere** → **Application Server V5.1** → **Administrative Console**.
3. Enter a user ID and click **OK**.
4. Expand **Environment**.
5. Click **Update Web server plugin**.
6. Click **OK**.
7. Click **Save** from the console menu.
8. Click the **Save** button.
9. Ensure that you log off.
10. Close the Administrative Console window.
11. You can now stop server1 by opening the Services panel, right-clicking on **server1**, and selecting **Stop**.
12. While in the Services panel, stop and start the IBM HTTP Server.

Clean up the cache

1. Disable Dynacache:
   a. Open a command line window.
   b. Change directories to:

      `*was_installdir*\installedapps\<*server_name*>\Stores.war\WEB-INF`

      For example:

      `C:\WebSphere\AppServer\installedapps\WC_demo.ear\Stores.war\WEB-INF`

   c. Locate the cachespec.xml file and change the name to something else, such as `oldcachespec.xml`.
2. Delete the cache:
   a. In the same command line window, change directories to:

      `was_installdir\temp\<server_name>`

      For example:

      `C:\WebSphere\AppServer\temp\WC_demo`

   b. Delete all of the contents from this directory, including all subdirectories.

3. Compile all of the JSPs for the site:
   a. In the same command line window, change directories to:
      ```
      was_installdir\bin
      ```
      For example
      ```
      C:\WebSphere\AppServer\Bin
      ```
   b. Run the following command to compile all the JSP files in all of the Web modules:
      ```
      JspBatchCompiler.bat -enterpriseapp.name server_name -cell.name
      host_name -node.name node_name -server.name server_name
      ```
      For example:
      ```
      JspBatchCompiler.bat -enterpriseapp.name WC_demo -cell.name cmw2kprol
      -node.name cmw2kprol -server.name WC_demo
      ```

Note: This takes quite some time to complete, so be patient.

Reorganize the tables and run stats

This is a good time to reorganize some key database tables that have had a large amount of data added to them. The tables that should be reorganized include:

- CATENTRY
- CATENTDESC
- ATTRIBUTE
- ATTRVALUE
- MEMBER
- MBRGRP
- ORGENTITY
- URLREG
- CMDREG
- VIEWREG
- ACACTACTGP
- ACACTDESC
- ACACTION
- ACCOUNT
- ACPOLICY
- ACRESGPRES
- ACRESGRP
- ACRSCGDES
- PLYCTYPDSC
- QTYFMTDESC
- STOREREL

The process for reorganizing and running statistics on tables when using DB2 is as follows:

1. Open a DB2 command window.
2. Connect to the database by issuing the command:

   ```
   db2 connect to dbname user dbuser using dbpassword
   ```

   In this syntax:

   - *dbname* is the name of the database
   - *dbuser* is the owner of the database tables
   - *dbpassword* is the password of the owner

3. To reorganize a table, enter the command:

   ```
   db2 reorg table table_name
   ```

4. To run statistics on a table, enter the command:

   ```
   db2 runstats on table table_name
   ```

5. When you have finished all of the tables, disconnect from the database and close the DB2 command window.
6. Restart the commerce and payment servers as defined in "Starting and stopping servers" on page 476.

8.2 Add sellers to stores

When each store was created, an organizational unit was created under the selected owning organization (Figure 8-4). This is a list of organizations that are accessible to the extendedsitesadmin.

Name	Parent	Status	Organization Type
B2C Seller Organization	Extended Sites Seller Organization	Unlocked	Organization
IBM Seller Organization	Extended Sites Seller Organization	Unlocked	Organization
B2C Sallar OrganizationB2C1	B2C Sellar Organization	Unlocked	Organization Unit
B2C Sallar OrganizationB2C2	B2C Seller Organization	Unlocked	Organization Unit
B2C Seller OrganizationB2C3	B2C Seller Organization	Unlocked	Organization Unit
IBM Seller OrganizationSWG	IBM Seller Organization	Unlocked	Organization Unit
IBM Sellar OrganizationIGS	IBM Seller Organization	Unlockad	Organization Unit
Extended Sites Sellar Organization	Root Organization	Unlocked	Organization
Extended Sites Hub Organization	Extended Sites Organization	Unlocked	Organization Unit

Figure 8-4 New organization list

The stores are owned by these organizational units that were created. We now add sellers to each of these organizational units to complete the customization of the stores:

- Check policy subscriptions in new organizations.
- Add roles to the new organizations.
- Add users to the new organizations.
- Assign roles to the users.

8.2.1 Check policy subscriptions in new organizations

The store creation process created a new organizational unit under the seller organization that was specified in the Store Creation Wizard. When these organizational units were created, they were subscribed to certain policy groups:

- B2C Seller OrganizationB2C1
  - ManagementAndAdministrationPolicyGroup - Root Organization
  - CommonShoppingPolicyGroup - Root Organization
  - B2CPolicyGroup - Root Organization
  - B2BPolicyGroup - Root Organization
  - ConsumerDirectStorefrontAssetStore PolicyGroup - Asset Store Organization

  We added GuestShopperManagementPolicyGroup - Default Organization
- B2C Seller OrganizationB2C2
  - ManagementAndAdministrationPolicyGroup - Root Organization
  - CommonShoppingPolicyGroup - Root Organization
  - B2CPolicyGroup - Root Organization
  - B2BPolicyGroup - Root Organization
  - ConsumerDirectStorefrontAssetStore PolicyGroup - Asset Store Organization

  We added GuestShopperManagementPolicyGroup - Default Organization
- B2C Seller OrganizationB2C3
  - ManagementAndAdministrationPolicyGroup - Root Organization
  - CommonShoppingPolicyGroup - Root Organization
  - B2CPolicyGroup - Root Organization
  - B2BPolicyGroup - Root Organization
  - CustomB2CStorefrontAssetStore PolicyGroup - Asset Store Organization

  We added GuestShopperManagementPolicyGroup - Default Organization
- IBM Seller OrganizationSWG
  - ManagementAndAdministrationPolicyGroup - Root Organization
  - CommonShoppingPolicyGroup - Root Organization

- B2BPolicyGroup - Root Organization
- B2BDirectStorefrontAssetStore PolicyGroup - Asset Store Organization
- B2BDirectStorefronAssetStore GuestCatalogEnabled Policy Group - Asset Store Organization

▸ IBM Seller OrganizationIGS

- ManagementAndAdministrationPolicyGroup - Root Organization
- CommonShoppingPolicyGroup - Root Organization
- B2BPolicyGroup - Root Organization
- B2BDirectStorefrontAssetStore PolicyGroup - Asset Store Organization
- B2BDirectStorefronAssetStore GuestCatalogEnabled Policy Group - Asset Store Organization

To add a policy subscription to an organization:

1. Stay in the Organization Administration Console, and select **Access Management** → **Organizations**.
2. Select an organization to work: Check the box next to the organization name and click **Policy Subscription**.
3. Select a policy group from the Available policy groups list and click **Add**. This removes the policy group from the Available policy groups list and adds it to the Selected policy groups list.
4. Select a policy group from the Selected policy groups list and click **Remove**. This removes the policy group from the Selected policy groups list and adds it back to the Available policy groups list.
5. Click **OK** when complete.

8.2.2 Add roles to the new organizations

To add roles to the new organizations:

1. In the Organization Administration Console, select **Access Management** → **Organizations**.
2. Check the box next to **B2C Seller OrganizationB2C1** and click **Roles**.
3. Click **Add all**.
4. Click **OK**.
5. Check the box next to **B2C Seller OrganizationB2C2** and click **Roles**.
6. Click **Add all**.
7. Click **OK**.
8. Check the box next to **B2C Seller OrganizationB2C3** and click **Roles**.
9. Click **Add all**.

10.Click **OK**.

11.Check the box next to **IBM Seller OrganizationSWG** and click **Roles**.

12.Click **Add all**.

13.Click **OK**.

14.Check the box next to **IBM Seller OrganizationIGS** and click **Roles**.

15.Click **Add all**.

16.Click **OK**.

Stay in the Organization Administration Console for the next process.

8.2.3 Add users to the new organizations

To add users to the new organizations:

1. In the Organization Administration Console, select **Access Management** → **Users**.
2. Click **New**.
3. Enter the following information:

   Logon ID (required) b2c1seller
   Last name (required) Seller
   Password (required) <password>
   Account policy Administrators
   Parent organization B2C Seller OrganizationB2C1
   Street address
   City
   State/Province
   Zip/Postal code
   Country/Region
   E-mail address 1 b2c1seller@cmw2kpro3.dyndns.org
4. Click **OK**.
5. Click **New**.
6. Enter the following information:

   Logon ID (required) b2c2seller
   Last name (required) Seller
   Password (required) <password>
   Account policy Administrators
   Parent organization B2C Seller OrganizationB2C2
   Street address
   City
   State/Province

Zip/Postal code
Country/Region
E-mail address 1 b2c2seller@cmw2kpro3.dyndns.org

7. Click **OK**.
8. Click **New**.
9. Enter the following:

Logon ID (required)	b2c3seller
Last name (required)	Seller
Password (required)	<password>
Account policy	Administrators
Parent organization	B2C Seller OrganizationB2C3
Street address	
City	
State/Province	
Zip/Postal code	
Country/Region	
E-mail address 1	b2c3seller@cmw2kpro3.dyndns.org

10. Click **OK**.
11. Click **New**.
12. Enter the following:

Logon ID (required)	swgseller
Last name (required)	Seller
Password (required)	<password>
Account policy	Administrators
Parent organization	IBM Seller OrganizationSWG
Street address	
City	
State/Province	
Zip/Postal code	
Country/Region	
E-mail address 1	swgseller@cmw2kpro3.dyndns.org

13. Click **OK**.
14. Click **New**.
15. Enter the following:

Logon ID (required)	igsseller
Last name (required)	Seller
Password (required)	<password>
Account policy	Administrators
Parent organization	IBM Seller OrganizationIGS
Street address	

City	
State/Province	
Zip/Postal code	
Country/Region	
E-mail address 1	igsseller@cmw2kpro3.dyndns.org

16.Click **OK**.

Stay in the Organization Administration Console.

8.2.4 Assign roles to the users

To assign roles to the users:

1. While still on the Users page, check the box for **b2c1seller** and click **Roles**.
2. Select **B2C Seller OrganizationB2C1** from the Select organization list.
3. Select **Seller** from the Role list box.
4. Click **Add**.
5. Click **OK**.
6. Check the box next to **b2c2seller** and click **Roles**.
7. Select **B2C Seller OrganizationB2C2** from the Select organization list.
8. Select **Seller** from the Role list box.
9. Click **Add**.
10. Click **OK**.
11. Check the box next to **b2c3seller** and click **Roles**.
12. Select **B2C Seller OrganizationB2C3** from the Select organization list.
13. Select **Seller** from the Role list box.
14. Click **Add**.
15. Click **OK**.
16. Check the box next to **swgseller** and click **Roles**.
17. Select **IBM Seller OrganizationSWG** from the Select organization list.
18. Select **Seller** from the Role list box.
19. Click **Add**.
20. Click **OK**.
21. Check the box next to **igsseller** and click **Roles**.
22. Select **IBM Seller OrganizationIGS** from the Select organization list.
23. Select **Seller** from the Role list box.
24. Click **Add**.
25. Click **OK**.
26. Log off the Organization Administration Console and close the window.

8.3 Set up WebSphere Commerce Payments

In order for the individual Extended Sites store administrators to have access to WebSphere Commerce Payments, the site administrator must define roles. You can complete the Payments setup for your store by using the Administration Console or the Payments user interface. If you use the Administration Console, menu items appear on the Payments menu. If you use the Payments user interface, these items appear under Administration in the navigation frame.

Note: WebSphere Commerce Payments must be configured initially by the site administrator.

8.3.1 Authorizing cassettes for your store

WebSphere Commerce Payments offers several payment cassettes that you can use to implement electronic payment protocols. The merchant and cassette relationship is a payment system that buyers use when they shop online. WebSphere Commerce Payments offers the following cassettes:

- OfflineCard
- CustomOffline
- BankServACH
- VisaNet
- PaymentTech

Note: OfflineCard is installed and enabled by default.

To authorize a cassette for your store:

1. Select **Merchant Settings**.
2. Click your store name in the Merchant name column.
3. Select the cassettes that you wish to authorize for your store.
4. Click **Update**.

Important: If Payment Manager was not running when your store was created, you must add a new merchant (your store) to authorize cassettes for your store. When creating a new merchant, the merchant number that is specified must match the WebSphere Commerce store ID. To create a new merchant, select **Merchant Settings** and click **Add a Merchant**.

To configure cassettes for your store:

1. Select **Merchant Settings**.

2. Select a cassette to configure by clicking the icon in the row for your store and the column for the cassette you want to configure.
3. Click **Accounts** on the cassette's page for your store and:
   - To change existing accounts, click the account name.
   - To create a new account, click **Add an Account**.

8.3.2 Assigning WebSphere Commerce Payments access roles

Four roles in the Payments framework have relative mappings to corresponding roles in WebSphere Commerce. When you create users in WebSphere Commerce, you must first assign the WebSphere Commerce roles to those users. The users will display in the Payments UI, where you can assign them their corresponding Payments roles. Table 8-2 maps the Payments user roles to corresponding WebSphere Commerce roles.

Table 8-2 Role mapping

Payments role	WebSphere Commerce role
Payments Administrator	Site Administrator
Merchant Administrator	Seller Administrator
Supervisor	Operations Manager
Clerk	Operations Manager

Payments Administrators and Merchant Administrators can manage WebSphere Commerce Payments. Supervisors and Clerks are financial roles that do not administer WebSphere Commerce Payments, but they do manage the payment processing functions. Table 8-3 on page 141 lists the responsibilities for each Payments role.

Table 8-3 Role definitions

Role	Responsibilities
Payments Administrator	▸ Define Merchant Administrators, Supervisors, and Clerks ▸ Configure merchants and their cassettes ▸ Identify the Payments host name and status ▸ Configure any installed cassettes ▸ Add, delete, and update event listeners ▸ Settle payments ▸ Approve of sale orders ▸ Issue credits and reverse credits ▸ Deposit orders ▸ Search for orders and batches ▸ View daily batch totals
Merchant Administrator	▸ Define Merchant Administrators, Supervisors, and Clerks ▸ Configure payment cassette settings ▸ Add, delete, and update event listeners
Supervisor	▸ Settle payments ▸ Approve of sale orders ▸ Issue credits and reverse credits ▸ Deposit orders ▸ Search for orders and batches ▸ View daily batch totals
Clerk	▸ Settle payments ▸ Approve of sale orders ▸ Issue credits and reverse credits ▸ Deposit orders ▸ Search for orders and batches ▸ View daily batch totals

Note: When WebSphere Commerce is installed, the WebSphere Commerce Site Administrator is assigned the role of Payments Administrator automatically.

To assign a WebSphere Commerce Administrator to a Payments role:

1. Log on to the WebSphere Commerce Administration Console using the Site Administrator ID created during instance creation.
2. From the Administration Console Site/Store selection page, select **Site**.
3. From the Payments menu, select **Users**.

4. On the User Search page, enter selection criteria and click **Search**.

   This displays a list resembling Figure 8-5.

User name	Merchant	Role
siteadmin	-	Payments Administrator
b2c1seller	-	No WebSphere Commerce Payments access
b2c2seller	-	No WebSphere Commerce Payments access
b2c3seller	-	No WebSphere Commerce Payments access
b2cselleradmin	-	No WebSphere Commerce Payments access
extendedsitesadmin	-	No WebSphere Commerce Payments access
ibmselleradmin	-	No WebSphere Commerce Payments access
igsseller	-	No WebSphere Commerce Payments access
swgseller	-	No WebSphere Commerce Payments access

Figure 8-5 Payments: Users list page

5. Select an appropriate user by clicking the user name.
6. From the Merchant list, select one or more stores that this user's role will cover.
7. Select a Payments role for the user by clicking the appropriate radio button.
8. Click **Update**.
9. Click the straight arrow on the right side of the page to return to the Users list. The selected merchants and roles are now displayed.

We assigned the role of Merchant Administrator to each of the sellers that were just created (Figure 8-6).

User name	Merchant	Role
b2c1seller	B2C1	Merchant Administrator
b2c2seller	B2C2	Merchant Administrator
b2c3seller	B2C3	Merchant Administrator
swgseller	SWG	Merchant Administrator
igsseller	IGS	Merchant Administrator
siteadmin	-	Payments Administrator
b2csellerladmin	-	No WebSphere Commerce Payments access
extendedsitesadmin	-	No WebSphere Commerce Payments access
ibmselleradmin	-	No WebSphere Commerce Payments access

Figure 8-6 Merchant administrators

Important: If you assign a Payments role to a WebSphere Commerce user and later want to delete or rename the logon ID of this user, you must remove the user's Payments role before you delete or rename the WebSphere Commerce user's logon ID.

8.4 Customize the B2C1 store

In this section, we customize the B2C1 store through the WebSphere Commerce Accelerator:

1. Access the WebSphere Commerce Accelerator.
2. Log on using the new seller ID that we created for this store, `b2c1seller`.

   There will be no store selection page displayed as this user only has access to a single store, B2C1.
3. Update the store profile.
4. Customize the store pages.
5. Customize the store flow.
6. Define shipping and taxes.
7. Configure messages and report delivery settings.
8. Add return reasons.
9. Customize the catalog.

8.4.1 Update the store profile

To update the store profile, select **Store → Change Profile**. This displays the store notebook, which contains five pages:

- General
- Contact
- Location
- Language
- Currency

Click a tab to change the page. Update any needed information and click **OK** when complete.

We changed the e-mail address on the contact page from the seller administrator address (because that is who created the store) to the address of the new seller, which will be used for all store reporting and notification delivery.

8.4.2 Customize the store pages

This section describes the steps that we followed to customize the look of the B2C1 storefront. This section covers three topics:

- Customizing the content of the store pages
- Uploading a custom store logo
- Selecting a style and color scheme

Customizing the content of the store pages

To customize the content of store pages:

1. Access the WebSphere Commerce Accelerator.
2. Select **Store** → **Change Pages** to display the Change Pages page.

Figure 8-7 Change Pages page

3. Click the arrow next to the message that you need to customize and enter your message in the available box.
4. Click **View Location** to see your message in a preview page (Figure 8-8 on page 145).

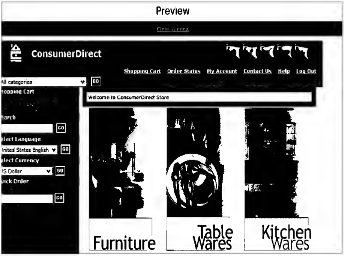


Figure 8-8 Preview page.

5. Go through each of the messages and make changes as needed, and click **OK** when you are finished.

Uploading a custom store logo

We created a custom logo for each store and uploaded it:

1. Access the WebSphere Commerce Accelerator.
2. Select **Store** → **Upload Logo** to display the Upload Logo page (Figure 8-9).

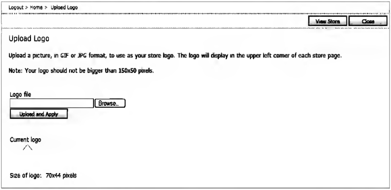


Figure 8-9 Upload Logo page

3. Click **Browse** to find the file containing your logo.
4. Click **Upload and Apply**.
5. Click **View Store** to see your new logo in the store's home page in a new browser window. Close the window when you are finished.
6. Click **Close**.

Selecting a style and color scheme

We wanted each store to have a unique style. To change the style, banner, or color scheme of the store:

1. Access the WebSphere Commerce Accelerator.
2. Select **Store → Change Style**. The Change Style page is displayed.
3. Select one of the available styles by clicking the radio button next to the desired style.
4. Click **Next**. The Color page is displayed.
5. Select one of the available color schemes by clicking the radio button next to the desired color.
6. Click **Apply** and then **View Store** to see the selected colors on the store's home page in a separate browser window. Close the window when you are done.
7. Click **Next**. The Banner page is displayed.
8. To use an available banner, click the radio button next to the desired banner.
9. To use your own banner, click the radio button next to **Use your own banner.**
   a. Enter the fully qualified path and file name of your banner or click **Browse** to locate it.
   b. Click **Upload**.
10. Click **Apply** and then **View Store** to see the selected banner on the store's home page in a separate browser window. Close the window when you are done.
11. Click **Finish** when you have completed all of your changes.

8.4.3 Customize the store flow

To customize the flow of the store using one of the available options:

1. Access the WebSphere Commerce Accelerator.
2. Select **Store → Change Flow**. The Registration page of the Change Flow notebook is displayed (Figure 8-10 on page 147).

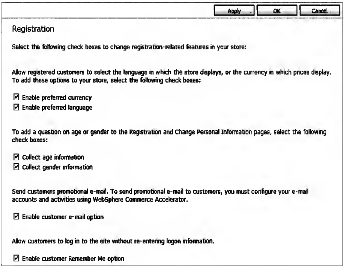


Figure 8-10 Change Flow - Registration

3. Note the current selections and change those that you need for your particular store.
4. Click the **Catalog** tab. The Catalog page of the Change Flow notebook is displayed (Figure 8-11).

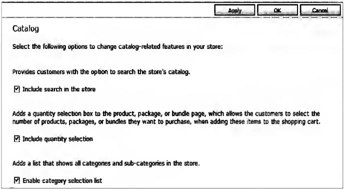


Figure 8-11 Change Flow - Catalog

5. Note the current selections and change those that you need for your particular store.

6. Click the **Orders** tab. The Orders page of the Change Flow notebook is displayed (Figure 8-12).

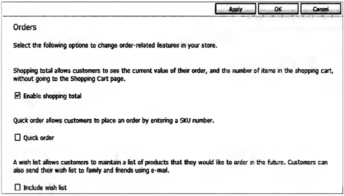


Figure 8-12 Change Flow - Orders

7. Note the current selections and change those that you need for your particular store.
8. Click the **Checkout** tab. The Checkout page of the Change Flow notebook is displayed (Figure 8-13).

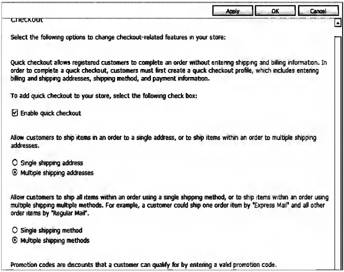


Figure 8-13 Change Flow - Checkout

9. Note the current selections and change those that you need for your particular store.
10. Click the **Order Status** tab. The Order Status page of the Change Flow notebook is displayed (Figure 8-14).

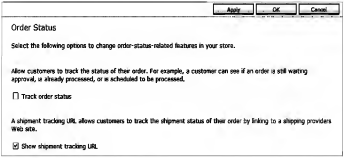


Figure 8-14 Change Flow - Order Status

11. Note the current selections and change those that you need for your particular store.
12. Click **Apply** when you are done and then click **OK**.

8.4.4 Define shipping and taxes

Before a store can charge shipping or taxes, the codes and rates must be defined.

See 11.2.8, “Store: Change Shipping” on page 337 for details on how to define shipping for a store.

See 11.2.9, “Store: Change Tax” on page 341 for details on how to define taxes for a store.

8.4.5 Configure messages and report delivery settings

Several standard messages and reports must be configured for each store to ensure successful operation. The following sections provide the steps to complete these tasks.

Configure messages

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store → Message Type Configuration**.

2. Check the box next to **Message for notifying the merchant of an order**.
3. Click **Configure**.
4. The Recipient field should be filled with the e-mail address provided when the store was created. It can be changed as long as a valid e-mail address is entered.
5. Enter a valid e-mail address in the Sender field. All other fields are optional.
6. Click **Finish**.
7. Click **OK**.
8. Repeat steps 2 through 7 for the remaining message types.

Configure report delivery settings

1. Still in the WebSphere Commerce Accelerator, select **Store** → **Report Delivery Settings**.
2. Select either **Monthly** or **Quarterly** under Frequency.
3. Select either **Text** or **Comma separated** under Format.
4. Click **OK**.

8.4.6 Add return reasons

Before you can accept any product returns at a store, you must define at least one return reason as none are provided out-of-the-box. Here is what we did:

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store** → **Return Reasons**.
2. Click **New**.
3. Enter `NotLike` in Name.
4. Enter `Customer did not like it` in Reason.
5. Select **Customer** from the Type list box.
6. Click **OK**.
7. Click **New**.
8. Enter `DOA` in Name.
9. Enter `Dead on Arrival` in Reason.
10. Select **Customer** from the Type list box.
11. Click **OK**.

8.4.7 Customize the catalog

We decided that B2C1 will carry all of the products in the shared catalog but that we would adjust the pricing on a category basis. We now position B2C1 as more of a high-end computer store with B2C2 looking to sell more peripherals and specialty items:

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Merchandise** → **Catalog Filter**.
2. Select **IBM Thinkpad** in the catalog tree display.
3. Select **Set Price Adjustment**.
4. Enter 5 in the percent field.
5. Select **Markup** from the list box.
6. Click **OK**.
7. Select **IBM NetVista** in the catalog tree display.
8. Select **Set Price Adjustment**.
9. Enter 5 in the percent field.
10. Select **Markup** from the list box.
11. Click **OK**.
12. Select **Monitors** in the catalog tree display.
13. Select **Set Price Adjustment**.
14. Enter 5 in the percent field.
15. Select **Markup** from the list box.
16. Click **OK**.
17. Select **IBM Printers** in the catalog tree display.
18. Select **Set Price Adjustment**.
19. Enter 5 in the percent field.
20. Select **Markup** from the list box.
21. Click **OK**.
22. Click **Save** when complete.
23. Click **OK**. The catalog tree display will resemble Figure 8-15 on page 152.

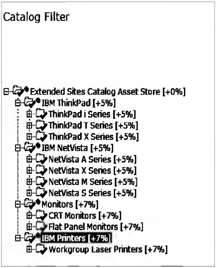


Figure 8-15 Catalog filter

8.4.8 Add vendors

Because we are using the default inventory method of ATP, we will be tracking inventory shipments. To define an expected inventory record, you must first define at least one vendor, as inventory is expected from a vendor.

To define a vendor:

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Merchandise → Vendors**.
2. Click **New**.
3. Enter values in the following fields:
   - Name (required)
   - Description (required)
   - Street address
   - City
   - State/Province
   - ZIP/Postal code
   - Country/Region
4. Click **Next**.

5. Enter contact information:
   - Title
   - First name
   - Middle name
   - Last name
   - Position
   - Phone number
   - E-mail address
   - Fax number
6. Click **Finish**.
7. Click **OK**.

8.5 Customize the B2C2 store

In this section, we customize the B2C2 store through the WebSphere Commerce Accelerator:

1. Access the WebSphere Commerce Accelerator.
2. Log on using the new seller ID that we created for this store, `b2c2seller`.

   No store selection page is displayed as this user only has access to a single store, B2C2.
3. Update the store profile.
4. Customize the store pages.
5. Customize the store flow.
6. Define shipping and taxes.
7. Configure messages and report delivery settings.
8. Add return reasons.
9. Customize the catalog.

8.5.1 Update the store profile

To update the store profile, select **Store** → **Change Profile**. This displays the store notebook, which contains five pages:

- General
- Contact
- Location
- Language
- Currency

Click a tab to change the page. Update any needed information and click **OK** when complete.

On the Contact page, we changed the e-mail address from the seller administrator address (that is who created the store) to that of the new seller. This e-mail address is used for all store reporting and notification delivery.

8.5.2 Customize the store pages

B2C2 has a common look and feel with B2C1. We customized the messages, added a logo, and set the style to match B2C1 but with a different color. For more information, see 8.4.2, "Customize the store pages" on page 144.

8.5.3 Customize the store flow

B2C2 has a common look and feel with B2C1. Set the store flow to match that of B2C1. For more information, see 8.4.3, "Customize the store flow" on page 146.

8.5.4 Define shipping and taxes

Before a store can charge shipping or taxes, the codes and rates must be defined.

See 11.2.8, "Store: Change Shipping" on page 337 for details on how to define shipping for a store.

See 11.2.9, "Store: Change Tax" on page 341 for details on how to define taxes for a store.

8.5.5 Configure messages and report delivery settings

Several standard messages and reports must be configured for each store to ensure successful operation. The following sections provide the steps to complete these tasks.

Configure messages

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store → Message Type Configuration**.
2. Check the box next to **Message for notifying the merchant of an order**.
3. Click **Configure**.
4. The Recipient field should be filled with the e-mail address provided when the store was created. It can be replaced with another valid e-mail address.

5. Enter a valid e-mail address in the Sender field. All other fields are optional.
6. Click **Finish**.
7. Click **OK**.
8. Repeat steps 2 through 7 for the remaining message types.

Configure report delivery settings

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store → Report Delivery Settings**.
2. Select either **Monthly** or **Quarterly** under Frequency.
3. Select either **Text** or **Comma separated** under Format.
4. Click **OK**.

8.5.6 Add return reasons

Before you can accept any product returns at a store, you must define at least one return reason as there are none provided out-of-the-box. To see what we did, go to 8.4.6, "Add return reasons" on page 150.

8.5.7 Customize the catalog

We decided to add some new products to this store's catalog, so customizing the catalog will be a two-step process.

Catalog filter

We decided that B2C2 will carry all of the products in the shared catalog with an across-the-board markup of 5%. This is how we accomplished it:

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Merchandise → Catalog Filter**.
2. Click **Extended Sites Catalog Asset Store** in the catalog tree display.
3. Select **Set Price Adjustment**.
4. Enter 5 in the percent field.
5. Select **Markup** from the list box.
6. Click **OK**. The catalog tree display should resemble Figure 8-16 on page 156.

Figure 8-16 B2C2 catalog filter

7. Click **Save**.
8. Click **OK**.

Add new products

We further decided that B2C2 will sell some printer accessories along with the printers. This requires adding a new category, adding products, and then creating some merchandising associations:

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Merchandise → Catalog Management**.
2. Click **New Category**.
3. Enter `Printer_Acc` in the Category Code field.
4. Enter `Printer Accessories` in the **Name** field.
5. Enter `Neat things that go with printers` in the Description field.
6. Click **Next**.
7. Select **IBM Printers** from the catalog tree display.

8. Click **Next**.
9. Enter `images\catalog\printer_accessories_sm.gif` in the Thumbnail image field.
10. Enter `images\catalog\printer_accessories.gif` in the Full size image field.
11. Click **Finish**.
12. Click **OK**. The Catalog Management page is displayed.
13. Expand the IBM Printers category and you should see the new category under it.

Now we can add the products:

1. Select **Printer Accessories** in the catalog tree display.
2. Click **New Product**. The General page of the New Product Wizard is displayed.
3. Enter `printer_paper` in the Code field.
4. Enter `Printer Paper` in the Name field.
5. Click **Next**.The Description page is displayed.
6. Enter `Really good printer paper` in the Short Description field.
7. Enter `It is really good paper` in the Long Description field.
8. Click **Next**. The Category page is displayed.
9. Printer Accessories should already be highlighted so just click **Next**. The Images page is displayed.
10. Enter `images\catalog\paper.gif` in the Full size image field.
11. Enter `images\catalog\paper_sm.gif` in the Thumbnail image field.
12. Click **Next**. The Manufacturer page is displayed.
13. Enter appropriate values and click **Next**. The Sales Tax page is displayed.
14. Select appropriate tax rates and click **Next**. The Shipping Tax page is displayed.
15. Select appropriate shipping tax rates and click **Next**. The Units of Measure page is displayed.
16. Enter the appropriate units of measure for shipping and click **Next**. The Fulfillment page is displayed.
17. We kept all of the defaults and entered a value of `1` for the smallest amount that can be measured.
18. Click **Next**. The Advanced page is displayed.
19. We did not have a URL to go to for this product so we just clicked **Finish**.

20.Click **OK** on the dialog box.

21.We added two other products, cables and toner cartridges, in a similar fashion before we set prices.

We now need to set prices.

1. Select **Printer Accessories** from the catalog tree display.
2. Click **List Catalog Entries**. The Product Management tool is displayed.
3. Select the first product to work with, **Printer Paper**, by clicking the check box next to the Code.
4. Select **Prices** → **Set Prices**.
5. Enter a List Price (optional).
6. Enter an amount in the Price field of the first price range.
7. You can enter additional price ranges to allow for quantity discounts (optional).
8. Click **OK** when you are done.
9. Click **OK**.

10.Repeat these steps to set prices for the other products.

Now we create some attributes.

1. Still in the Product Management tool, select the product to work with, **Printer Paper**, by checking the box next to the Code.

   Note: These are check boxes, not radio buttons. Be sure that only one product is checked at a time when creating attributes.

2. Select **Tools** → **Defining Attributes**.
3. Click the top **New** button.
4. Enter weight in the Name field.
5. Add at least one value by clicking **Add Value**, entering a value, and clicking **Add**.
6. Click **OK**.
7. Click **OK**.
8. We added a second attribute called `color`.
9. Click **Generate SKUs**.

10.Click **OK**.

11.Click **OK**. The SKUs are generated and displayed.

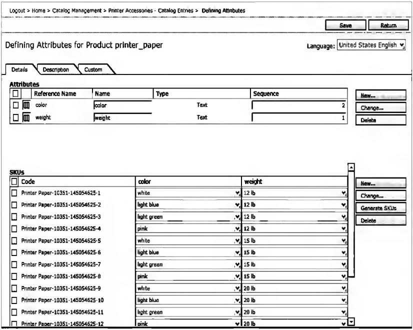


Figure 8-17 SKUs for our paper product

12.The system generates SKUs for all possible attribute combinations. You can delete the ones that you do not need by selecting their SKUs and clicking **Delete**.

13.Click **Save** when you are finished.

14.Click **OK**.

15.Click **Return**. The Product Management tool is displayed.

16.Define the attributes and SKUs for the remaining products.

We now want to create a merchandising association:

1. From the Product Management tool, click **Return**.
2. Select **Workgroup Laser Printers** from the catalog tree display.
3. Click **List Catalog Entries.**
4. Select **Infoprint® 1140.**
5. Select **Tools** → **Merchandising Associations**.

6. Click **Find Catalog Entries**.
7. Click **Find**.
8. Enter `Accessories` in the Category Field and click **Find**.
9. Select one or more of the items displayed in the Pick list. We selected the three printer cables that we created.
10. Click **Add**.
11. In the Target Catalog Entries list, change the Semantic in all three items to `Requires`.
12. Click **Save**.
13. Click **OK**.
14. Click **Return**.
15. Click **Return**. You are now back at the Catalog Management page.

Now load the product images:

1. Select **Merchandise** → **Catalog Import**.
2. Click **Upload Images**.
3. Select the directory to store your images. The default path is *store_name*`/images/catalog`.
4. Click **Browse** to locate your zip file containing the new images. We have images available in Additional Materials. (See "New Products" on page 490.)
5. Click **Upload**.
6. Click **Close**.

Go to the store home page and navigate to the printers. Click **Infoprint 1140**. You should see your merchandising association at the bottom of the product page.

8.5.8 Add vendors

Because we are using the default inventory method of ATP, we will be tracking inventory shipments. To define an expected inventory record, you must first define at least one vendor because inventory is expected from a vendor.

See 8.4.8, "Add vendors" on page 152 for the steps to add a vendor.

8.6 Customize the B2C3 store

We customize the B2C3 store through the WebSphere Commerce Accelerator:

1. Access the WebSphere Commerce Accelerator.
2. Log on using the new seller ID that we created for this store, `b2c3seller`.

   No store selection page is displayed as this user only has access to a single store, B2C3.
3. Update the store profile.
4. Customize the store pages.
5. Customize the store flow.
6. Define shipping and taxes.
7. Configure messages and report delivery settings.
8. Add return reasons.
9. Customize the catalog.

8.6.1 Update the store profile

To update the store profile, select **Store** → **Change Profile**. This displays the store notebook, which contains five pages:

- General
- Contact
- Location
- Language
- Currency

Click a tab to change the page. Update any needed information and click **OK** when complete.

We changed the e-mail address on the contact page from the seller administrator address (that is who created the store) to that of the new seller. This e-mail address is used for all store reporting and notification delivery.

8.6.2 Customize the store pages

In our customized consumer direct store we wanted to do a few things differently, so we added new dynamic text and a new style before we started this process:

- Customize the content of store pages.
- Upload a custom store logo.
- Select a style and color scheme.

Add new dynamic text

By default, the product display view shows a static message, `Some restrictions may apply`, whenever a discount applies. We now change that static message to a dynamic one that can be modified using the Change Pages tool.

Add properties to hold and display the dynamic text

Every WebSphere Commerce starter store has three locale-specific properties files for store text. For the consumer direct stores, these files are:

- storetext_locale.properties

  Contains the static text used in the store. For example, the `Some restrictions may apply` message is currently provided in this properties file.

- storetext_dynamic_locale.properties

  Contains the dynamic text used in the store. You will be adding a new property to represent the dynamic text message to this file.

- storetext_dynamic_labels_locale.properties

  Contains the text used in the Change Pages page to describe the message. You will be adding a new label and description for the dynamic text message to this file.

To define the new dynamic text message for the store and the Change Pages page:

1. Navigate to the following directory:

   ```
   was_installdir\installedApps\node_name\server_name\Stores.war\WEB-INF\cl
   asses\StorefrontAssetStore_name
   ```

   For example:

   ```
   C:\WebSphere\AppServer\installedApps\cmw2kpro1\WC_demo.ear\Stores.war\WE
   B-INF\classes\CustomB2CStorefrontAssetStore
   ```

2. Open the storetext_dynamic_*locale*.properties file in a text editor.

   Note: *locale* refers to the language-specific file. If you have a multilingual site, you have to update each file. The name of the English file is storetext_dynamic_en_US.properties.

3. Insert the following text at the end of the file:

   ```
   #
   ShoppingArea\CatalogSection\CatalogEntrySubsection\CachedProductOnlyDisp
   lay.jsp
   Discount_Disclaimer = Some restrictions may apply
   ```

4. Save and close the file.

5. Open the storetext_dynamic_labels_*locale*.properties file, located in the same directory, for editing.
6. Insert the following text at the end of the file:

```
#
ShoppingArea\CatalogSection\CatalogEntrySubsection\CachedProductOnlyDisp
lay.jsp
DiscountDisclaimer = Discount disclaimer
DiscountDisclaimer_Text =
```

7. Save and close the file.
8. Restart your WebSphere Commerce Server to load the changed properties files.

Create a preview page for the location of the text message

The Change Pages page features a View Location button for each dynamic message. When a user clicks this button, a preview of the relevant store page is displayed, indicating the location on the page where the message will display. The preview page is a stand-alone HTML page that is identical to the actual store page but with the dynamic message text highlighted.

To create a preview page for the location of your new dynamic message, using the HTML source of an existing store page:

1. Browse to the product display page of the B2C3 store.
2. Select **View → Source** in the browser window. A window containing the HTML source of the page opens.
3. Save the HTML source in a file named Preview_DiscountDisclaimer.html in the following directory:

```
was_installdir\installedApps\node_name\server_name\Stores.war\tools\stor
es\StorefrontAssetStore_name\text\preview\locale
```

   For example:

```
C:\WebSphere\AppServer\installedApps\cmw2kpro3\WC_demo.ear\Stores.war\to
ols\stores\CustomB2CStorefrontAssetStore\text\preview\en_US
```

4. Open the Preview_DiscountDisclaimer.html file in a text editor.
5. Locate the lines of HTML that define the static message Some restrictions may apply:

```
document.write('<img
src="/wcsstore/CustomB2CStorefrontAssetStore/images/Discount_star.gif"
align="middle" alt="Some restrictions may apply" /> Some restrictions
may apply');
```

6. Highlight the static message by wrapping its text in a red-bordered HTML table as follows:

```
document.write('<table border="10" style="border-color:red;"
width="100%"><tr><td>'+'<img
src="/wcsstore/CustomB2CStorefrontAssetStore/images/Discount_star.gif"
align="middle" alt="Some restrictions may apply" /> Some restrictions
may apply'+'</td></tr></table>');
```

7. Locate the link element that specifies the style sheet:

```
<link rel="stylesheet"
href="/wcsstore/CustomB2CStorefrontAssetStore/css/Master1_1.css"
type="text/css"/>
```

8. Because the preview page will be placed in a different location than the product display page, change the path to the style sheet as follows:

```
<link rel="stylesheet" href="../Master.css" type="text/css"/>
```

9. To include images from the product display store page in the preview:

   a. Load the preview page into a Web browser and take note of broken images.

   b. Return to the store page from step 1 and save the required images to the following directory:

   ```
   wcs_installdir\installedApps\node_name\server_name\Stores.war\tools\s
   tores\StorefrontAssetStore_name\text\preview\locale\images
   ```

   For example:

   ```
   C:\WebSphere\AppServer\installedApps\cmw2kpro1\WC_demo.ear\Stores.war
   \tools\stores\CustomB2CStorefrontAssetStore\text\preview\en_US\images
   ```

10. Return to the Preview_DiscountDisclaimer.html file and change the src attribute of the img element for all affected images to refer to the ../images directory.

11. (Optional) To distinguish Preview_DiscountDisclaimer.html as a preview file and remain consistent with existing preview files:

   a. Insert the following text immediately after the opening <body> tag:

   ```
   <table cellpadding="0" cellspacing="0" border="0" width="100%">
   <tr>
       <td class="h1center">Preview</td>
   </tr>
   <tr>
       <td class="buttonback"><a href="#" id="content1"
   onclick="window.close()">Close Window</a></td>
   </tr>
   <tr>
       <td class="template">
   ```

b. Insert the following text immediately before the closing </body> tag:

```
    </td>
</tr>
<tr>
    <td class="buttonback"><a href="#" id="content1"
onclick="window.close()">Close Window</a></td>
</tr>
</table>
```

12.Save and close the file.

Add a section to the storefront configuration file

To add the option for setting the discount disclaimer text to the Change Pages page:

1. Navigate to the following directory:

   was_installdir\installedApp*node_name**server_name*\Stores.war\WEB-INF\xml\tools\stores*StorefrontAssetStore_name*\devtools\storefront

   For example:

   ```
   C:\WebSphere\AppServer\installedApps\cmw2kpro1\WC_demo.ear\Stores.war\WE
   B-INF\xml\tools\stores\CustomB2CStorefrontAssetStore\devtools\storefront
   ```

2. Open the StoreFront.xml file in a text editor.
3. Add the following lines to the store-front-text element:

```
<!--
ShoppingArea/CatalogSection/CatalogEntrySubsection/CachedProductOnlyDisp
lay.jsp -->
<page>
   <label>
      <message key="DiscountDisclaimer"
              resource="storetext_dynamic_labels"/>
   </label>
   <description>
      <message key="DiscountDisclaimer_Text"
              resource="storetext_dynamic_labels"/>
   </description>
   <content>
      <message key="Discount_Disclaimer"
              resource="storetext_dynamic"/>
   </content>
   <location
file="tools/stores/$storeDir$/text/preview/$locale$/Preview_DiscountDisc
laimer.html"/>
</page>
```

4. Save and close the file.

Update the JSP page

To enable the dynamic message in the product display JSP page:

1. Navigate to the following directory:

   was_installdir\installedApp*node_name**server_name*\Stores.war*StorefrontAssetStore_name*\ShoppingArea\CatalogSection\CatalogEntrySubsection

2. Open the CachedProductOnlyDisplay.jsp file in a text editor.
3. Locate the following line, which currently displays the static message:

```
<fmt:message var="disclaimer" key="DISCOUNT_DISCLAIMER"
bundle="${storeText}"/>
```

4. Change the line to use the dynamic text message as follows:

```
<fmt:message var="disclaimer" key="Discount_Disclaimer"
bundle="${storeDynamicText}"/>
```

5. Save and close the file.
6. If your Web container is not configured to reload JSP pages, restart your WebSphere Commerce server.

Add a new style

We decided that we needed a new style for our B2C3 store that was not currently available. Here is how to add a new one.

Define a new style in the style configuration file

To define a new style in the style configuration file:

1. Navigate to the following directory:

   was_installdir\installedApps*node_name**server_name*\Stores.war\WEB-INF\xml\tools\stores*StorefrontAssetStore_name*\devtools\flow\style

2. Open the style configuration file, style.xml, for in a text editor.
3. Update the StylePanelOptions option group:

   a. Locate the StylePanelOptions option group. It begins with this tag:

   ```
   <option-group id="StylePanelOptions" type="radio" panel="StylePanel">
   ```

   b. Add a new option element, highlighted in bold, to the end of the option-group element, using the existing option elements as a template:

   ```
   <option-group id="StylePanelOptions" type="radio" panel="StylePanel">

     <option id="Style.1"
       enables-features="Style.f.1"
       enables-options="Color.1 Color.2 Color.3 Color.4 Color.5 Color.6"
       src="tools/stores/$storeDir$/style/styles/style1.gif"
       selected-by-default="true" />
   ```

```
  <option id="Style.2"
    enables-features="Style.f.2"
    enables-options="Color.7 Color.8 Color.9 Color.10 Color.11
Color.12"
    src="tools/stores/$storeDir$/style/styles/style2.gif" />

<option id="Style.3"
    enables-features="Style.f.3"
    enables-options="Color.13 Color.14 Color.15 Color.16"
    src="tools/stores/$storeDir$/style/styles/style3.gif" />

</option-group>
```

4. Update the ColorPanelOptions group:

   a. Locate the ColorPanelOptions option group. It begins with this tag:

   ```
   <option-group id="ColorPanelOptions" type="radio" panel="ColorPanel">
   ```

   b. Add four new option elements, for each of the four style-color combinations introduced in the previous step, to the end of the option-group element, using the existing option elements as a template:

   ```
   <option id="Color.13"
     enables-features="Color.f.13"
     enables-options="Banner.1 Banner.7 Banner.13 Banner.19"
     src="tools/stores/$storeDir$/style/colors/color3_1.gif"
     selected-by-default="true" />
   <option id="Color.14"
     enables-features="Color.f.14"
     enables-options="Banner.2 Banner.8 Banner.14 Banner.20"
     src="tools/stores/$storeDir$/style/colors/color3_2.gif" />
   <option id="Color.15"
     enables-features="Color.f.15"
     enables-options="Banner.3 Banner.9 Banner.15 Banner.21"
     src="tools/stores/$storeDir$/style/colors/color3_3.gif" />
   <option id="Color.16"
     enables-features="Color.f.16"
     enables-options="Banner.4 Banner.10 Banner.16 Banner.22"
     src="tools/stores/$storeDir$/style/colors/color3_4.gif" />
   ```

   c. Update the BannerPanelOptions group:

   a. Locate the BannerPanelOptions option group. It begins with this tag:

   ```
   <option-group id="BannerPanelOptions" type="radio"
   panel="BannerPanel">
   ```

   b. Observe that all of the color-banner combinations you have referred to in the ColorPanelOptions option group are already defined in this group. Therefore, no changes are required.

Tip: If you had opted to create a new color-banner combination, you would add an option element to define it at the end of the option-group element, using the existing option elements as a template.

5. Save and close the file.

Create the style sheets

In this step, we create a new Cascading Style Sheet (CSS) for each style-color combination defined in the previous step. Use existing style sheets as a basis, as follows:

1. Navigate to the following directory:

   was_installdir\installedApps*node_name**server_name*\Stores.war*Storefront AssetStore_name*\css

2. List the contents of the directory and observe that a CSS file exists for each style-color combination originally defined in the style configuration file.
3. Make copies of the Master1_1.css, Master1_2.css, Master1_3.css, and Master1_4.css files in the same directory and name them Master3_1.css, Master3_2.css, Master3_3.css, and Master3_4.css, respectively.
4. Make the desired changes to the Master3_1.css file to effect the new style.
5. Apply similar changes to the three remaining files.

Create new header, footer, and sidebar JSP pages

In this step, we create a new header, footer, and sidebar JSP pages for the new style based on existing ones as follows:

1. Navigate to the following directory:

   was_installdir\installedApps*node_name**server_name*\Stores.war*Storefront AssetStore_name*\include\styles

2. List the contents of the directory and observe that it contains a subdirectory for each style defined in the store.
3. Create a new subdirectory, named style3, to hold the JSP files for the new style.
4. Copy the entire contents of an existing style subdirectory, such as style1, to your new style3 subdirectory. Ensure that you do not alter the names of any of the JSP files that you copy.
5. Modify the new header, footer, and sidebar JSP files as necessary for your new style.

Tip: Depending on the extent of your changes to the style sheets in the preceding step, no changes to the JSP files may be required.

Add style features to the feature repository

In this step, you will add the style features to the feature repository as follows:

1. Navigate to the following directory:

   was_installdir\installedApps*node_name**server_name*\Stores.war\WEB-INF\xml\tools\stores*StorefrontAssetStore_name*devtools\flow\repository

2. Open the Features.xml file for editing.
3. Locate the style section of the file by searching for the following string:

   ```
   <!-- Features for style -->
   ```

4. A feature with the ID Style.f.3 has been provided for you, so no modifications to this section are necessary.
5. Locate the color section of the file by searching for the following string:

   ```
   <!-- Features for stylesheets and image directories-->
   ```

6. Add the following elements to the end of the section:

   ```
   <feature id="Color.f.13" enables="vfile.style13.css vfile.color1.dir"/>
   <feature id="Color.f.14" enables="vfile.style14.css vfile.color2.dir"/>
   <feature id="Color.f.15" enables="vfile.style15.css vfile.color3.dir"/>
   <feature id="Color.f.16" enables="vfile.style16.css vfile.color4.dir"/>
   ```

7. Observe that the elements reference existing virtual file implementations for the color image directories.
8. Save and close the file.
9. Open the IncludePages/StyleDir.xml file for editing.
10. Add the following element within the page-components element (if it is not already present):

    ```
    <simple-implementation id="StyleDir.i1.impl3"
    url="include/styles/style3/"
    virtual-page-interface-id="StyleDir.i1" />
    ```

11. Save and close the file.
12. Open the VirtualPages.xml file for editing.
13. Locate the section specifying virtual style sheet implementations by searching for the following string:

    ```
    <virtual-file id="vfile.stylesheet"/>
    ```

14.Add the following virtual-file-implementation elements to the end of the section:

```
<virtual-file-implementation virtual-file-id="vfile.stylesheet"
url="css/Master3_1.css" id="vfile.style13.css"/>
<virtual-file-implementation virtual-file-id="vfile.stylesheet"
url="css/Master3_2.css" id="vfile.style14.css"/>
<virtual-file-implementation virtual-file-id="vfile.stylesheet"
url="css/Master3_3.css" id="vfile.style15.css"/>
<virtual-file-implementation virtual-file-id="vfile.stylesheet"
url="css/Master3_4.css" id="vfile.style16.css"/>
```

15.Save and close the file.

Create preview images for the new style

In this final step, we create the preview thumbnail images for selecting the new style and color combination in the Change Style wizard.

To create the preview images:

1. Use copies of existing thumbnail images as placeholders:
   a. Navigate to the following directory:

      ```
      was_instolldir\installedApps\node_name\server_name\Stores.war\tools\s
      tores\StorefrontAssetStore_name\style\styles
      ```

   b. List the contents of the directory and observe that a thumbnail image GIF file exists for each style originally defined in the style configuration file.
   c. Make a copy of the style1.gif file in the same directory and name it style3.gif.
   d. Navigate to the following directory:

      ```
      wos_instolldir\installedApps\node_name\server_nome\Stores.war\tools\s
      tores\StorefrontAssetStore_name\style\styles
      ```

   e. List the contents of the directory and observe that a thumbnail image GIF file exists for each style-color combination originally defined in the style configuration file.
   f. Make copies of the color1_1.gif, color1_2.gif, color1_3.gif, and color1_4.gif files in the same directory and name them color3_1.gif, color3_2.gif, color3_3.gif, and color3_4.gif, respectively.
2. Follow the instructions for changing store style to select your new style and the first style-color combination.
3. Replace the placeholder style3.gif and color3_1.gif files created in step 1 with a thumbnail version of a screen capture of the store's home page that is displayed.

4. Follow the instructions for changing store style to select the second style-color combination for your new style.
5. Replace the placeholder color3_2.gif file created in step 1 with a thumbnail version of a screen capture of the store's home page that is displayed.
6. Repeat steps 4 and 5 for the two remaining style-color combinations for your new style.

Check it out

Check out your handy work in B2C3 by following the steps outlined in 8.4.2, "Customize the store pages" on page 144. Be sure to use the new dynamic text and style.

8.6.3 Customize the store flow

B2C3 will utilize the same basic flow as B2C1. Set the store flow to match that of B2C1. For more information, see 8.4.3, "Customize the store flow" on page 146.

8.6.4 Define shipping and taxes

Before a store can charge shipping or taxes, the codes and rates must be defined.

See 11.2.8, "Store: Change Shipping" on page 337 for details on how to define shipping for a store.

See 11.2.9, "Store: Change Tax" on page 341 for details on how to define taxes for a store.

8.6.5 Configure messages and report delivery settings

Several standard messages and reports must be configured for each store to ensure successful operation. The following sections provide the steps to complete these tasks.

Configure messages

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store → Message Type Configuration**.
2. Check the box next to **Message for notifying the merchant of an order**.
3. Click **Configure**.
4. The Recipient field should be filled with the e-mail address provided when the store was created. You can replace it with another valid e-mail address.

5. Enter a valid e-mail address in the Sender field. All other fields are optional.
6. Click **Finish**.
7. Click **OK**.
8. Repeat steps 2 through 7 for the remaining message types.

Configure report delivery settings

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store → Report Delivery Settings**.
2. Select either **Monthly** or **Quarterly** under Frequency.
3. Select either **Text** or **Comma separated** under Format.
4. Click **OK**.

8.6.6 Add return reasons

Before you can accept any product returns at a store, you must define at least one return reason because none are provided out-of-the-box. To see what we did, go to 8.4.6, "Add return reasons" on page 150.

8.6.7 Customize the catalog

The B2C3 store will offer the products from the shared catalog as well as some additional products that no other store can sell. This was a requirement defined in 4.2, "Requirements" on page 82.

As this is the case, managing the catalog for B2C3 is a two-step process. First we must use the Catalog Filter tool to set which products or categories from the shared catalog will be offered, then we use the Catalog Import tool to load our sample catalog.

Catalog Filter

B2C3 will offer the contents of the shared catalog at the same 5% off of the wholesale pricing that is being offered in B2C2. See "Catalog filter" on page 155 for more details.

Load sample catalog

The files that we used in the following steps are located in the additional materials available with this book. See Appendix D, "Additional material" on page 489 for more information.

To import a simple catalog into the store:

1. From the Merchandise menu, select **Catalog Import**.
2. Click **Upload catalog**.
3. Select **UTF-8** from the catalog file encoding pull-down list.
4. Click **Browse**.
5. Select the CatalogLoad/samplecatalog.csv file on the machine.
6. Click **Upload File**.
7. Click **OK** to confirm that the CSV file has been uploaded successfully.
8. Select the check box next to the **catalog.csv** file.
9. Click **Upload Images**.
10. Click **Browse**.
11. Select the **CatalogLoad/images.zip** file on the machine.
12. Click the top-level folder, making sure the folder plus associated text is highlighted.

    Note: Images cannot be uploaded unless a folder is chosen before the Upload button is clicked.

13. Click **Upload**.

    The WebSphere Commerce Accelerator provides a summary of image files that were extracted from the images.zip file to the target store.
14. Click **Catalog Import** in the upper-right corner of the window (under the manage store banner).
15. Select the check box next to the **catalog.csv** file.
16. Click **Publish Catalog**.
17. To update the publishing status, select the check box next to the **catalog.csv** file and click **Refresh**. Eventually the status will change to Published. This signifies that the catalog was loaded to the target store successfully.
18. Select the check box next to the **catalog.csv** file.
19. The View Logs button is grayed-out because the publish was successful and no error logs are available to view.

    Error logs that help identify issues with catalog publishing issues may be found in this directory on the WebSphere Commerce Server machine:

    WC_installdir\instances*wc_instance_name*\temp\catalogimport\store_id

This process created two top-level categories: WebSphere and Application Development. After seeing this, we decided that it would be better if there were a single top-level category called Redbooks and the new categories were under it. This is how we changed that:

1. While still in the WebSphere Commerce Accelerator managing B2C3, select **Merchandise → Catalog Management**.
2. Click **New Category**.
3. Enter `Redbooks` in Category Code and Name fields.
4. Click **Next**.
5. Click **Extended Sites Catalog Asset Store** in the tree display.
6. Click **Next**.
7. Enter the relative locations for the images. Ours were:

   ```
   images\catalog\itso_sm.gif
   images\catalog\itso.gif
   ```

   These files were uploaded when we updated the images in the Catalog Import process.
8. Click **Finish**. The Catalog Management page is displayed.
9. Click **WebSphere** in the catalog tree display.
10. Click **Change Category**.
11. Click the **Parent Category** tab.
12. Click **Redbooks** in the catalog tree display and click **OK**. The Catalog Management page is displayed.
13. Click **Application Development** in the catalog tree display.
14. Click **Change Category**.
15. Click the **Parent Category** tab.
16. Click **Redbooks** in the catalog tree display and click **OK**. The Catalog Management page is displayed.

    Launch your store to check on the navigation.

8.6.8 Add vendors

Because we are using the default inventory method of ATP, we will be tracking inventory shipments. To define an expected inventory record, you must first define at least one vendor because inventory is expected from a vendor.

See 8.4.8, "Add vendors" on page 152 for the steps to add a vendor.

8.7 Customize the SWG store

In this section, we customize the SWG store through the WebSphere Commerce Accelerator:

1. Access the WebSphere Commerce Accelerator.
2. Log on using the new seller ID that we created for this store, swgseller.

   No store selection page is displayed as this user only has access to a single store, SWG.
3. Update the store profile.
4. Customize the store pages.
5. Customize the store flow.
6. Define shipping and taxes.
7. Configure messages and report delivery settings.
8. Add return reasons.
9. Customize the catalog.

8.7.1 Update the store profile

To update the store profile, select **Store → Change Profile**. This displays the store notebook, which contains five pages:

- General
- Contact
- Location
- Language
- Currency

Click a tab to change the page. Update any needed information and click **OK** when complete.

We changed the e-mail address on the contact page from the seller administrator address (that is who created the store) to that of the new seller. This e-mail address is used for all store reporting and notification delivery.

8.7.2 Customize the store pages

This section describes the steps to customize the look of the SWG storefront:

- Customizing the content of the store pages
- Uploading a custom store logo
- Selecting a style and color scheme

Customizing the content of the store pages

To customize the content of store pages:

1. Access the WebSphere Commerce Accelerator.
2. Select **Store** → **Change Pages**. The Change Pages page is displayed (Figure 8-18).

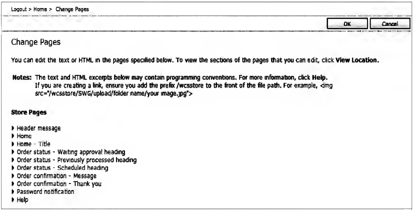


Figure 8-18 B2B direct Change Pages page

3. Click the arrow next to the message that you need to customize and enter your message in the available box.
4. Click **View Location** to see your message in a preview page (Figure 8-19).

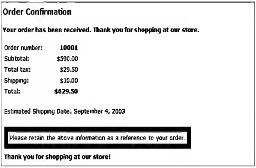


Figure 8-19 Preview page.

5. Go through each of the messages and make changes as needed, and click **OK** when you are finished.

Uploading a custom store logo

We create a custom logo for each store and uploaded it:

1. Access the WebSphere Commerce Accelerator.
2. Select **Store** → **Upload Logo**. The Upload Logo page is displayed.
3. Click **Browse** to find the file containing your logo.
4. Click **Upload and Apply**.
5. Click **View Store** to see your new logo in the store's home page in a new browser window (Figure 8-20). Close the window when you are done.

Figure 8-20 Preview Logo

6. Click **Close**.

Selecting a style and color scheme

We want each store to have a unique style. To change the style, banner, or color scheme of the store:

1. Access the WebSphere Commerce Accelerator.
2. Select **Store** → **Change Style**. The Change Style page is displayed.
3. Click the radio button next to the desired style.
4. Click **Next**. The Color page is displayed.
5. Click the radio button next to one of the available color schemes.
6. Click **Apply** and then **View Store** to see the selected colors on the store's home page in a separate browser window. Close the window when finished.
7. Click **Next**. The Banner page is displayed.
8. To use an available banner, click the radio button next to the desired banner.
9. To use your own banner, click the radio button next to **Use your own banner.**
   a. Enter the fully qualified path and file name of your banner or click **Browse** to locate it.

b. Click **Upload**.

10.Click **Apply** and then **View Store** to see the selected colors on the store's home page in a separate browser window. Close the window when finished.

11.Click **Finish** when you have completed all of your changes.

8.7.3 Customize the store flow

To customize the flow of the store using one of the available options:

1. Access the WebSphere Commerce Accelerator.
2. Select **Store** → **Change Flow** to display the Configure Customer Care page.

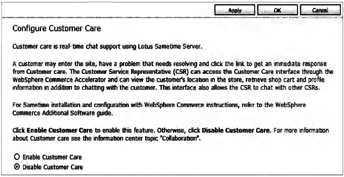


Figure 8-21 Change Flow - Configure Customer Care

3. Note the current selections and change those that you need for your store.
4. Click the **Collaborative Workspaces** tab.

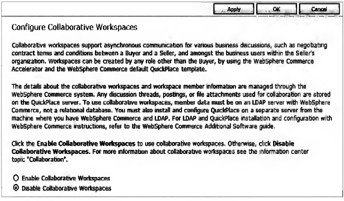


Figure 8-22 Change Flow - Configure Collaborative Workspaces

5. In the Collaborative Workspaces page of the Change Flow notebook, note the current selections and change those that you need for your particular store.
6. Click the **Catalog** tab. The Catalog page of the Change Flow notebook is displayed (Figure 8-23).

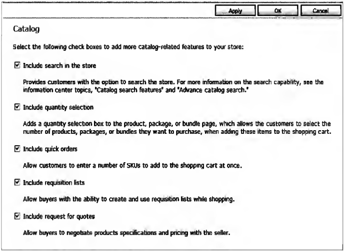


Figure 8-23 Change Flow - Catalog

7. Note the current selections and change those that you need for your particular store.

8. Click the **Order** tab. The Order page of the Change Flow notebook is displayed (Figure 8-24).

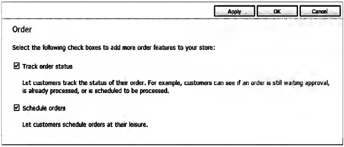


Figure 8-24 Change Flow - Order

9. Note the current selections and change those that you need for your particular store.
10. Click the **Configurable Store Display** tab. The Configurable Store Display page of the Change Flow notebook is displayed (Figure 8-25).

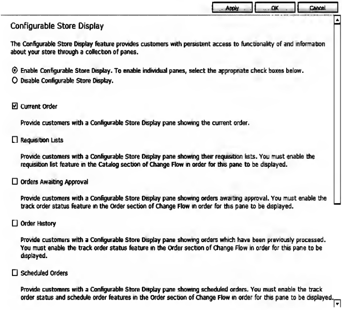


Figure 8-25 Change Flow - Configurable Store Display (1)

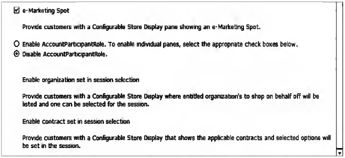


Figure 8-26 Change Flow - Configurable Store Display (2)

11.Note the current selections and change those that you need for your store.

12.Click **Apply** when you are done, then click **OK**.

8.7.4 Define shipping and taxes

Before a store can charge shipping or taxes, the codes and rates must be defined.

See 11.2.8, "Store: Change Shipping" on page 337 for details on how to define shipping for a store.

See 11.2.9, "Store: Change Tax" on page 341 for details on how to define taxes for a store.

8.7.5 Configure messages and report delivery settings

Several standard messages and reports must be configured for each store to ensure successful operation. The following sections provide the steps to complete these tasks.

Configure messages

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store → Message Type Configuration**.
2. Check the box next to **Message for notifying the merchant of an order**.
3. Click **Configure**.
4. The Recipient field should be filled with the e-mail address provided when the store was created. You can replace it with a valid e-mail address.
5. Enter a valid e-mail address in the Sender field. All other fields are optional.

6. Click **Finish**.
7. Click **OK**.
8. Repeat steps 2 through 7 for the remaining message types.

Configure report delivery settings

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store → Report Delivery Settings**.
2. Select either **Monthly** or **Quarterly** under Frequency.
3. Select either **Text** or **Comma separated** under Format.
4. Click **OK**.

8.7.6 Add return reasons

Before you can accept any product returns at a store, you must define at least one return reason because none are provided out-of-the-box. To see what we did, go to 8.4.6, "Add return reasons" on page 150.

8.7.7 Create contract

Three steps are required to create an initial contract:

- Create a base contract.
- Create a business account.
- Create the contract.

Create a base contract

Base contracts can be created at either the Extended Sites store or at the B2B Direct Storefront Asset Store. If they are created at the B2B Direct Storefront Asset Store, then they can be referenced by any Extended Sites store that is based on the B2B Direct Storefront Asset Store.

A contract can refer to another contract. For example, contract A can refer to contract B. Thus, a buyer who is entitled to contract A will be entitled to all the terms and conditions from contract A, as well as to all the terms and conditions in contract B.

A base contract must be in active state to enable customer contracts to refer to the base contract. You may not suspend or cancel a base contract if there are active customer contracts that refer to the base contract.

After you have specified that a contract should refer to another contract, you can change the reference but not the fact that the contract refers to another contract.

To create contracts that can be referred to by other contracts:

1. Create a holding organization for the base contracts.
2. Create a user under that organization to assign as the representative.
3. Create an account for the new base contract holding organization and check the box for **This account is for base contracts** on the Account Customer page of the Accounts notebook in the WebSphere Commerce Accelerator.
4. Create all of the base contracts under the new base contract account.
5. Specify a contract to refer to this contract by using the Contract notebook in the WebSphere Commerce Accelerator. Select the contract to refer to on the General Information page of this notebook.

The validation of a contract is not performed on base contracts. You may create a contract without buyer participants and without pricing and shipping terms and conditions. You can deploy this contract, but a buyer will not be able to purchase directly against a base contract. Contract validation is performed on the contract that refers to a base contract. For example, the validation rule that there must be at least one pricing term and condition in a contract is done on the combination of terms from the contract and the base contract. Therefore, there must be at least one pricing term and condition in either the contract or the base contract.

We created several base contracts under an existing business account, Base Contracts Account Organization. The account and customer organization were created when the ExtendedSites.sar file was published. The contracts that we created define different pricing points that can be used in other contracts. The steps that we followed are:

1. Access the WebSphere Commerce Accelerator.
2. Log on as `extendedsitesadmin`.
3. Select the **B2BDirectStorefrontAssetStore**.
4. Select **Sales** → **Accounts**.
5. Check the box next to **Base Contracts Account Organization**.
6. Click **New Contract**.
7. Complete the following fields on the General page.
   a. Enter `10 percent off` in the Contract name field.
   b. Enter `Provides across the board 10% off` in the Short description field.
   c. Select **Starts immediately**.
   d. Select **No Expiry date.**
8. Select the **Catalog Filter** tab.
9. Select **Extended Sites Catalog Asset Store** in the Catalog Filter tree.

10. Select **Include with Adjustment**.
11. Enter 10 in the percent field.
12. Select **Markdown** in the list box.
13. Click **OK**.
14. Click **OK** to save the contract.
15. Click **OK** on the dialog page. The Accounts page is displayed. The number of contracts under Base Contracts Account Organization should now read `1`.
16. Repeat this process, only this time, create a `20% off contract`.
17. Repeat this process, only this time, create a `30% off contract`.
18. Select **Base Contracts Account Organization** and click **Contracts**. The Contracts page is displayed. It should contain the three contracts that were just created.
19. Select the first contract in the list and click **Submit**.
20. Select the second contract in the list and click **Submit**.
21. Select the third contract in the list and click **Submit**.
22. Click **Refresh**. This may take some time.
23. The status of all the contracts should now say Active.

We now have three base contracts that can be shared across both the SWG and IGS stores. Next, we create a business account and a contract in each store.

Create a business account

You can create a business account only for the highest-level buyer organization within a customer. The highest-level organization is directly under the Root Organization. In our case, this is IBM. We now create a business account for the IBM customer within the SWG store.

1. Access the WebSphere Commerce Accelerator.
2. Log on as `extendedsitesadmin` or `swgseller`.
3. Select **SWG** in the store list if logged on as `extendedsitesadmin`.
4. Select **Sales** → **Accounts**.
5. Click **New**.
6. Select **IBM** in the organization list.
7. Select **ibmbuyeradmin** from the Contact list.
8. Click **OK**.
9. Click **OK**. The Accounts page displays with the new account for IBM in the list.

Create the contract

The following steps were used to create an initial contract between the store and the SWG buying organization.

1. While still on the Accounts page, check the box next to **IBM**.
2. Click **New Contract**. The New Contract notebook is displayed.
3. Complete the fields on the General page.
   a. Enter `SWG Contract` in the Contract name field.
   b. Enter `Initial SWG Contract` in the Short description field.
   c. Select **Starts immediately**.
   d. Select **No expiry date**.
   e. Select **10 percent off** in the Refer to contract list box. The following lines appear under the list:
   ```
   Contract reference details
      Store name: B2BDirectStorefrontAssetStore
      Account name: B2BDirectStorefrontAssetStore BaseContracts Account
   ```
   f. Click the **Customers** tab.
4. Select **SWG** in the Available customers list.
5. Click **Add** next to the list.
6. Expand the **Shipping** tab. There are three components to shipping:
   – Providers
   – Charge Type
   – Addresses
7. Click **Providers**. The Shipping Providers page is displayed.
8. Select a shipping provider from the Available shipping providers list.
9. Click **Add** next to the list.
10. Click **Charge Type**. The Shipping Charge Type page is displayed.
11. Select **Shipping charged by seller** in the Shipping charge type list box.
12. Select **Addresses**. The Shipping Addresses page is displayed.
13. Select **IBM** in the Available shipping addresses list.
14. Click **Add**.
15. Click the **Payment** tab. The Payments page is displayed.
16. Click **Add**. The Add Payment Method page is displayed.
17. Select **Bill customer later (Offline)** in the Payment method list box.
18. Enter a description in the Description field.

19.Select **IBM** in the Billing address list box. The billing address is displayed.

20.Click **OK** to see the Payment page with the new payment method in the list.

21.Click **OK**.

22.Click **OK**. The Accounts page is displayed.

23.Select the **IBM** account and click **Contracts** to display the Contracts page. You should see the SWG Contract in the list. The status will be Draft.

24.Check the box next to **SWG Contract**.

25.Click **Submit**. The status of the contract is changed to Deploying.

26.Click **Refresh** to update the contents of the page. After the contract status changes to Active, the contract is ready.

8.7.8 Add vendors

Because we are using the default inventory method of ATP, we will be tracking inventory shipments. To define an expected inventory record, you must first define at least one vendor, because inventory is expected from a vendor.

To define a vendor:

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Products → Vendors**.
2. Click **New**.
3. Enter values in the following fields:
   - Name (required)
   - Description (required)
   - Street address
   - City
   - State/Province
   - ZIP/Postal code
   - Country/Region
4. Click **Next**.
5. Enter contact information:
   - Title
   - First name
   - Middle name
   - Last name
   - Position
   - Phone number
   - E-mail address
   - Fax number

6. Click **Finish**.
7. Click **OK**.

8.8 Customize the IGS store

In this section, we customize the IGS store through the WebSphere Commerce Accelerator:

1. Access the WebSphere Commerce Accelerator.
2. Log on using the new seller ID that we created for this store, igsseller.

   No store selection page is displayed because this user only has access to a single store, IGS.
3. Update the store profile.
4. Customize the store pages.
5. Customize the store flow.
6. Define shipping and taxes.
7. Configure messages and report delivery settings.
8. Add return reasons.
9. Customize the catalog.

8.8.1 Update the store profile

To update the store profile, select **Store → Change Profile**. This displays the store notebook, which contains five pages:

- General
- Contact
- Location
- Language
- Currency

Click a tab to change the page. Update any needed information and click **OK** when complete.

We changed the e-mail address on the contact page from the seller administrator (who created the store) to that of the new seller. This e-mail address is used for all store reporting and notification delivery.

8.8.2 Customize the store pages

This store has a similar look and feel to the SWG store. See 8.7.2, "Customize the store pages" on page 175 for instructions about changing the store pages for a B2B direct store.

8.8.3 Customize the store flow

This store has a similar look and feel to the SWG store. See 8.7.3, "Customize the store flow" on page 178 for instructions about changing the store flow for a B2B direct store.

8.8.4 Define shipping and taxes

Before a store can charge shipping or taxes, the codes and rates must be defined.

See 11.2.8, "Store: Change Shipping" on page 337 for details on how to define shipping for a store.

See 11.2.9, "Store: Change Tax" on page 341 for details on how to define taxes for a store.

8.8.5 Configure messages and report delivery settings

Several standard messages and reports must be configured for each store to ensure successful operation. The following sections list the steps to complete these tasks.

Configure messages

1. Assuming that you are still in the WebSphere Commerce Accelerator, select **Store → Message Type Configuration**.
2. Check the box for **Message for notifying the merchant of an order**.
3. Click **Configure**.
4. The Recipient field should be filled with the e-mail address provided when the store was created. You can replace it with a valid e-mail address.
5. Enter a valid e-mail address in the Sender field. All other fields are optional.
6. Click **Finish**.
7. Click **OK**.
8. Repeat steps 2 through 7 for the remaining message types.

Configure report delivery settings

1. In the WebSphere Commerce Accelerator, select **Store → Report Delivery Settings**.
2. Select either **Monthly** or **Quarterly** under Frequency.
3. Select either **Text** or **Comma separated** under Format.
4. Click **OK**.

8.8.6 Add return reasons

Before you can accept any product returns at a store, you must define at least one return reason because none are provided out-of-the-box. To see what we did, go to 8.4.6, "Add return reasons" on page 150.

8.8.7 Create a contract

We created a business account for the parent, IBM, and a contract for IGS the same way as for the SWG store. We do not have to create a base contract because we will use one that was already created. We also need to create a business account for use in the store. ("Create a business account" on page 184), then a contract between the buyer organization, IGS, and this store. (See "Create the contract" on page 185 for details.)

8.8.8 Add vendors

Because we are using the default inventory method of ATP, we will be tracking inventory shipments. To define an expected inventory record, you must first define at least one vendor because inventory is expected from a vendor. See 8.7.8, "Add vendors" on page 186 for the steps to add a vendor.

8.9 Open the stores for business

This can be done at either the store level or the hub level. When managing an individual store with the WebSphere Commerce Accelerator:

1. Select **Store → Open/Close**.
2. Click **Open Store**. This opens the store for business. You can click **Launch Store** to open a separate browser window with the store's home page.

If the hub administrator is using WebSphere Commerce Accelerator to manage the Extended Sites Hub, a store can be opened by:

1. Selecting **Extended Sites → View Stores**.

2. Select a store in Closed status by clicking the box next to the store name.
3. Click **Open**. This opens the store for business.

8.10 Register buyers (B2B only)

At this time, the B2B direct stores are ready for buyers. The buyers must first register at the store. The registrations must then be approved by a buyer approver before the buyers can access the store.

This section includes the following subsections:

- System modification
- Registration
- Approvals

8.10.1 System modification

To satisfy two of the requirements identified in 4.2, "Requirements" on page 82, we have to make a small modification to one of the system files.

- Users registered in a parent buyer organization can shop in both B2B direct stores.
- Users registered in a child buyer organization can shop in only one B2B direct store.

We encountered a problem when attempting to implement a solution that matched the requirements listed above. Each time a user is given the role of Registered Customer to a parent seller organization, they automatically have the same role for the child seller organizations. We got around this problem by creating a separate child buyer organization, All Stores. Our current organization structure offers three possible scenarios when registering buyers:

1. Buyer A accesses the SWG store and registers, entering her Buyer Organization as `SWG/IBM`. She is given the role of Registered Customer in the IBM Seller OrganizationSWG and is granted access only to the SWG store.
2. Buyer B accesses the IGS store and registers, entering his Buyer Organization as `IGS/IBM`. He given the role of Registered Customer in the IBM Seller OrganizationIGS and is granted access only to the IGS store.
3. Buyer C accesses either the SWG store or the IGS store and registers with a Buyer Organization of `All Stores/IBM`. She is given the role of Registered Customer in the IBM Seller Organization and access to both stores.

Enabling the third scenario requires modifying the file called MemberRegistrationAttributes.xml.

MemberRegistrationAttributes.xml

Roles are assigned based on the MemberRegistrationAttributes.xml file, which follows the format defined by the MemberRegistrationAttributes.dtd file. Both of these files are located in *wc_installdir*/instances/*instance_name*/xml/member.

At member (user, buyer, or reseller) registration, the MemberRegistrationAttributes.xml file is used to determine which roles should be assigned to members within the WebSphere Commerce system. This file has four sections or elements:

- UserRoles

  The UserRoles section is used to define roles in an organization and includes roles defined by name, registrationType, or DN (distinguished name).

- OrganizationRoles

  OrganizationRoles is used to define roles for organizations and includes roles defined by name only.

- BusinessEntities

  The BusinessEntities section is used to list the organizations that act as business entities.

- RegistrationParents

  The RegistrationParents section is used to define where to create new users or organizations for a particular registration type.

UserRoles

The UserRoles section (Example 8-1 on page 192) contains User nodes. The role assignment algorithm iterates through the list of User nodes and returns the first one that matches. This process is based on the following elements:

- registrationType (for example, userRegistration, ResellerRegistration, BuyerRegistration).
- memberAncestor (the organizations and organizational units that make up the user's ancestor tree)
- The store ancestor (the organizations and organizational units that make up the ancestor tree of the store to which the user is registering). For each user ancestor, the file looks for User nodes that match the registrationType and storeAncestor, and returns the first group from each ancestor that matches.

When a role group is found that matches the outer criteria, WebSphere Commerce attempts to assign the roles in the group to the user or organization. Each role consists of:

- A name (for roles for organization, this is the only required attribute).

- A roleContext, which can have the following values:
  - userParent - The role is applied to the organization that is the user's immediate parent.
  - storeOwner - The role is assigned to the organization that owns the store to which the user is registering.
  - explicit - The role is assigned to a DN that is explicitly specified. The last attribute is DN, which in the case of explicit role type, WebSphere Commerce assigns the role to this organization. In the case of the storeOwner or userParent, the organization resolved to must be a descendant of the specified DN.

Example 8-1 UserRoles

```
<UserRoles>
 <User registrationType="UserRegistration"
  memberAncestor="o=Default Organization,o=Root Organization"
  storeAncestor="o=Root Organization">
 <Role name="Registered Customer"
  roleContext="storeOwner"
  DN="o=Reseller Organization,o=Root Organization"/>
 <Role name="Registered Customer"
  roleContext="storeOwner"
  DN="o=Seller Organization,o=Root Organization"/>
 ...
</UserRoles>
```

In Example 8-1, the WebSphere Commerce scans down the list of User nodes until it finds one that matches. The matching is determined by:

- The registrationType (thus, the system is invoking a standard UserRegistrationAdd command).
- The member's ancestor (in this case, the user's parent organization must be somewhere under the default organization).
- The store's ancestor (in this case, the system matches on any store, because the store ancestor is defined as the root organization, which is an ancestor of every store).

After WebSphere Commerce locates a matching role group, it attempts to assign the roles from that group. In this case, two roles are defined in the group. Both are registered customer roles to be applied at the organization that owns the store to which the user is registering, but are qualified by the ancestor of the store (meaning that WebSphere Commerce applies the role only if the store is somewhere under the specified DN).

OrganizationRoles

The OrganizationRoles section (Example 8-2) is very similar to the user roles section, except that it is where the roles for new organizations are defined. The main difference is that the roles listed within the role groups for organizations are defined by name only; that is, after WebSphere Commerce locates a matching role group, it simply creates all roles defined in the list.

Example 8-2 OrganizationRoles

```
<Organization registrationType="ResellerRegistration"
  memberAncestor="o=Supplier Organization,o=Root Organization"
  storeAncestor="o=Root Organization">
 <Role name="Seller"/>
 <Role name="Category Manager"/>
 <Role name="Logistics Manager"/>
 <Role name="Marketing Manager"/>
 <Role name="Sales Manager"/>
 <Role name="Seller Administrator"/>
 <Role name="Registered Customer"/>
</Organization>
```

Example 8-2 shows that if an organization that matches on the outer criteria (registrationType, memberAncestor, and storeAncestor) is created, then all of the roles listed will be created for that organization.

BusinessEntities

The BusinessEntities section (Example 8-3) follows the same structure as the OrganizationRoles section. It is used to list the organizations that act as business entities in the system. Roles are not defined in the BusinessEntities section, which is used simply to list organizations.

Example 8-3 BusinessEntities

```
<BusinessEntities>
 <Organization registrationType=""
  memberAncestor="o=Supplier Organization,o=Root Organization"
  storeAncestor="o=Root Organization"/>
</BusinessEntities>
```

RegistrationParents

The last section is RegistrationParents (Example 8-4 on page 194), where WebSphere Commerce defines the parent organization for new users and organizations. Although many of the WebSphere Commerce commands allow the programmatic assignment of parent, certain business models require that the parent be fixed. In this case, WebSphere Commerce fixes the parents in this file.

Example 8-4 RegistrationParents

```
<RegistrationParents>
 <Organization registrationType="ResellerRegistration"
  memberAncestor="o=Supplier Organization,o=Root Organization"
  storeAncestor="ou=Supplier Hub Organization,o=Supply Chain Management
 Organization,o=Root Organization"/>
</RegistrationParents>
```

Making the change

To make the needed change:

1. Make a backup copy of the following file:

   wc_installdir\instances*instance_name*\xml\member\MemberRegistrationAttributes.xml

   For example:

   C:\WebSphere\CommerceServer561\instances\demo\xml\member\MemberRegistrationAttributes.xml

2. Open the original file in a text editor.
3. Locate the line containing </UserRoles>.
4. Just above this line, add:

```
<!-- Redbook Customization Example: business direct and business
indirect supplier -->
<User registrationType="BuyerRegistration" memberAncestor="o=IBM,o=Root
Organization" storeAncestor="o=Root Organization">
<Role name="Buyer Administrator" roleContext="userParent" DN="o=Root
Organization"/>
<Role name="Buyer Approver" roleContext="userParent" DN="o=Root
Organization"/>
<Role name="Buyer (buy-side)" roleContext="userParent" DN="o=Root
Organization"/>
<Role name="Registered Customer" roleContext="explicit" DN="o=IBM Seller
Organization,o=Extended Sites Seller Organization,o=Root Organization"/>
</User>
<User registrationType="UserRegistration" memberAncestor="o=All
Stores,o=IBM,o=Root Organization" storeAncestor="o=Extended Sites Seller
Organization,o=Root Organization">
<Role name="Registered Customer" roleContext="explicit" DN="o=IBM Seller
Organization,o=Extended Sites Seller Organization,o=Root Organization"/>
<Role name="Buyer (buy-side)" roleContext="userParent" DN="o=Root
Organization"/>
</User>
<!-- Redbook Customization Example: business direct and business
indirect supplier -->
```

Following the conventions for indentation will make it more readable. Be sure that you do not add any blank lines, because this can cause an error that may not be readily apparent.

If there are errors in this file, the registration process will hang up as well as any attempt to access the Organization Administration Console.

> **Note:** We included the additional code in the Additional Materials for this book. See "How to use the Web material" on page 490 for information.

5. After you have checked your work, save the file and close the text editor.
6. Stop and start the servers ("Starting and stopping servers" on page 476.

8.10.2 Registration

Registration is relatively simple. The buyer accesses the store's home page and is presented with the logon page (Figure 8-27). On first visit, the buyer should click **Register User**.

The registration page opens for entering identifying information. Figure 8-28 on page 196 shows the top portion of this page.

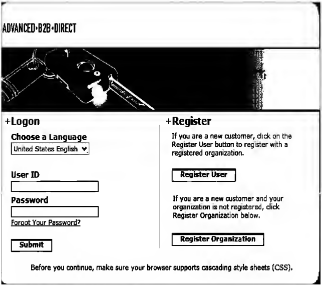


Figure 8-27 B2B direct logon page

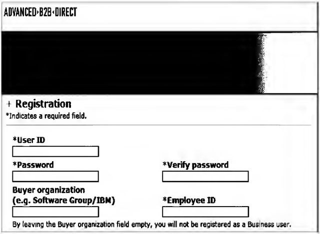


Figure 8-28 Buyer registration page

The buyer then enters values in all fields that are marked as required. The key fields are User ID, Password, and e-mail address. The Buyer organization field is not marked as required but if it is left blank, the approval disappears, never to be found. This field must be filled appropriately!

The defined buyer organizations at this time are:

- IBM
  - SWG
  - IGS
  - All Stores

Buyers for the Software Group must enter `SWG/IBM` in order for their registration approval to be directed to the appropriate approver.

Buyers for Global Services must enter `IGS/IBM` in order for their registration approval to be directed to the appropriate approver.

Buyers requesting access to both stores need only register at one of the stores, entering `All Stores/IBM` in the Buyer Organization field.

Any other entries in this field generate an error message.

After registration is complete, the buyer is returned to the logon page but cannot log on until registration has been approved. Otherwise, this message appears:

```
Your registration is pending approval. You are not authorized to log on at
this time.
```

8.10.3 Approvals

If valid e-mail addresses were entered when the buyer approvers were added to the system, they should receive an e-mail notification for each approval request. The buyer approver has two options:

- Access the store home page.
- Access the Organization Administration Console directly.

When the buyer accesses the store home page, a link on the page to the Organization Administration Console (Figure 8-29) opens the Organization Administration Console in a separate browser window.

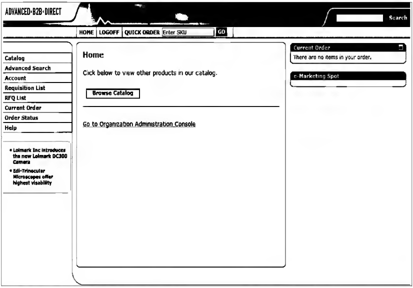


Figure 8-29 B2B direct direct store home page

The buyer approver can then approve or reject the approval requests. A notification e-mail will be sent to the buyer when this is done, assuming that the correct e-mail address was entered in the registration page.

For details about how to approve or reject approval requests, see 9.3.8, "Approvals: Approval Requests" on page 239 and 9.3.9, "Approvals: Find Approval Requests" on page 240.

Manage Extended Sites

By now, the site and all the stores are up and running. This part provides details about the ongoing management of a WebSphere Commerce implementation using Extended Sites.

This part includes the following chapters:

Manage the site

In this chapter, we have highlighted the tasks commonly performed by the Site Administrator. The Site Administrator role discussed in this book is synonymous with the System Administrator role found in many companies.

The Site Administrator has access to all menus and can perform all related actions. This chapter focuses on the responsibilities that are unique to the Site Administrator role. Although much of what the Site Administrator does is not unique to an Extended Sites environment, we have attempted to identify those activities that are specific to Extended Sites.

The initial sections of this chapter cover the basic tools that are available to the Site Administrator, and the final section provides detailed steps to completing specific tasks.

This chapter includes the following sections:

- Configuration Manager
- Administration Console
- Organization Administration Console
- Tasks

9.1 Configuration Manager

In this section, we discuss what the Configuration Manager is, how to get to it, and what it enables you to do.

To launch the Configuration Manager on Windows:

1. Ensure that the IBM WC Configuration Manager server process is running by selecting **Start** → **Settings** → **Control Panel** → **Administrative Tools** → **Services**. The IBM WC Configuration Manager service status should be Started.

   If it is not, right-click it and select **Start** from the context menu.

2. Select **Start** → **Programs** → **IBM WebSphere Commerce** → **Configuration** to display the Configuration manager logon page.

To create, configure, or delete a WebSphere Commerce instance, you should use the Configuration Manager. This tool is designed to enable you to configure your instance while preventing you from entering invalid values.

The Configuration Manager should be used to modify most WebSphere Commerce configuration parameters, but some parameters must be changed through the WebSphere Commerce Configuration File (*wc_instance_name*.xml). Refer to an individual component's documentation in the online help to determine whether it should be configured through the Configuration Manager or through the WebSphere Commerce configuration file (*wc_instance_name*.xml).

9.1.1 Database update tool

The database update tool updates the merchant key. Updating the merchant key re-encrypts all encrypted data (for example, passwords and credit card numbers) with the new merchant key in a WebSphere Commerce database for a given WebSphere Commerce instance.

Review the WebSphere Commerce Security Guide before changing the merchant key.

To start the database update tool:

1. Open the Configuration Manager.
2. Expand the host name.
3. Expand **Commerce**.
4. Expand **Instance List**.

5. Expand the instance name for which you want to run the database update tool.
6. Expand **Instance Properties**.
7. Right-click **Database** and select **Run Database Update Tool**.
8. After the database tool is complete, close the Configuration Manager.

9.1.2 Enabling auctions

Before you can run auctions on your store or run the auctions reference application, you must first enable auctions with WebSphere Commerce.

To enable auctions:

1. Open the Configuration Manager.
2. On the left side of the Configuration Manager screen, expand **WebSphere Commerce**, then the host name, **Instance List**, and your instance name.
3. Click the **Auctions** component.
4. On the right side of the Configuration Manager screen, check **Enable**.
5. In the SMTP Server field, enter the name of your SMTP server.
6. In the Reply E-mail field, enter the e-mail address of the person who will be sending auction notification messages and receiving responses to them. Typically, this person will be a Site Administrator.
7. Click **Apply**. A message displays explaining that the Auctions component was configured successfully.
8. Close the Configuration Manager.
9. Start and stop the application servers according to the instructions in "Starting and stopping servers" on page 476.

9.2 Administration Console

In this section, we discuss what the Administration Console is, how to get to it, and what it enables you to do.

To start the Administration Console:

1. Access the following URL in your browser:

   `https://host_name:8002/adminconsole`

   host_name is the fully qualified TCP/IP name of your WebSphere Commerce Server.

2. From the Logon page, type your site administrator ID and password and click **Log On**.

   If you are authorized to work with more than one store or language, the Administration Console Site/Store Selection page displays. If you are authorized to work with a single store and language, the Administration Console home page displays. Tasks that you are authorized to perform display in the Administration Console home page.

3. From the Administration Console Site/Store selection page, select the site radio button and click **OK**.

   The Site Administration Console home page displays as shown in Figure 9-1.

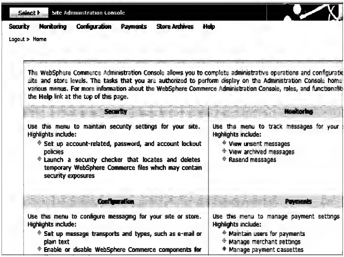


Figure 9-1 Site Administration Console

The Site Administration Console provides several menus that contain the bulk of the functionality required to perform the site administrator role:

- Security
  - Account policy
  - Password policy
  - Account lockout policy
  - Security checker
- Configuration
  - Transports
  - Message types
  - Component configuration
  - Scheduler

  - Registry
  - View unsent messages
  - View archived messages
  - Product information
- Payments
  - Users
  - Merchant settings
  - Payment settings
  - Cassettes
- Store Archives
  - Publish
  - Publish status

9.2.1 Security: Account policy

This page enables you to set up an account policy, which is used to define the password and account lockout policies for a particular type of user account. The default account policies include:

- Shoppers
- Administrators

Figure 9-2 depicts the Account policy page.

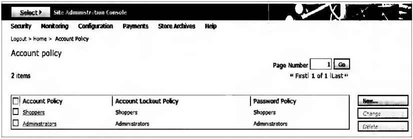


Figure 9-2 Account policy

> **Note:** When adding a new account policy, you must first add any required password and account lockout policies.

To create a new account policy:

1. From the Security menu, select **Account Policy**.
2. Click **New**.
3. Enter a unique name for the new account policy.

4. Select an existing Password policy from the pull-down list.
5. Select an existing Account lockout policy from the pull-down list.
6. Click **OK**.

To change an existing account policy:

1. From the Security menu, select **Account Policy**.
2. Check the box next to the account policy to be changed.
3. Click **Change**.
4. Make the required changes.
5. Click **OK**.

To delete an existing account policy:

1. From the Security menu, select **Account Policy**.
2. Check the box next to the account policy to be deleted.
3. Click **Delete**.

> **Note:** You cannot delete an account policy that is in use. You must first change all of the user accounts to use a new account policy and then delete the old account policy.

9.2.2 Security Password policy

This page enables you to control a user's password selection in order to define the characteristics of the password to ensure that it complies with the security policy of your site. It lists all existing password policies including those supplied by default:

- Shoppers
- Administrators

A password policy defines the attributes to which an entered password must comply. The password policy enforces the following conditions:

- Whether the user ID and password can match
- Maximum occurrence of consecutive characters
- Maximum instances of any character
- Maximum lifetime of the password
- Minimum number of alphabetic characters
- Minimum number of numeric characters
- Minimum length of a password
- Whether the user's previous password can be reused

Figure 9-3 on page 207 depicts the Password Policy page.

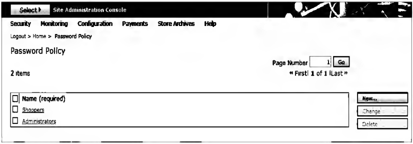


Figure 9-3 Password policy

To add a new password policy:

1. From the Security menu, select **Password Policy**.
2. Click **New**.
3. Enter a unique name for the new password policy.
4. Make any required changes to the default values supplied on the page.
5. Click **OK**.

To change an existing password policy:

1. From the Security menu, select **Password Policy**.
2. Check the box next to the password policy to be changed.
3. Click **Change**.
4. Make any required changes.
5. Click **OK**.

To delete an existing password policy:

1. From the Security menu, select **Password Policy**.
2. Check the box next to the password policy to be deleted.
3. Click **Delete**.

   Note: You cannot delete a password policy that is in use.

9.2.3 Security: Account lockout policy

This page enables you to set up an account lockout policy for different user roles within WebSphere Commerce. An account lockout policy disables a user account if malicious actions are launched against it, in order to reduce possible compromising of the account. The page lists all existing account lockout policies, including the ones supplied by default:

- Shoppers
- Administrators

The account lockout policy enforces the following items:

- The account lockout threshold. This is the number of invalid logon attempts before the account is disabled.
- Consecutive unsuccessful login delay. This is the time period for which the user is not allowed to log on, after two failed logon attempts. The delay gets incremented by the configured time delay value (for example, 10 seconds) with every consecutive logon failure.

Figure 9-4 depicts the Account Lockout Policy page.

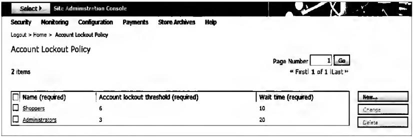


Figure 9-4 Account Lockout policy

To add a new account lockout policy:

1. From the Security menu, select **Account Lockout Policy**.
2. Click **New**.
3. Enter a unique name for the new account lockout policy.
4. Make any required changes to the default values supplied on the page.
5. Click **OK**.

To change an existing account lockout policy:

1. From the Security menu, select **Account Lockout Policy**.
2. Check the box next to the account lockout policy to be changed.
3. Click **Change**.
4. Make any desired changes.
5. Click **OK**.

To delete an existing account lockout policy:

1. From the Security menu, select **Account Lockout Policy**.
2. Check the box next to the account lockout policy to be deleted.
3. Click **Delete**.

Note: You cannot delete an account lockout policy that is in use.

9.2.4 Security: Security checker

This page (Figure 9-5) enables you to manually launch a security program that checks and deletes temporary WebSphere Commerce files that may contain potential security exposures. Normally the security check program runs as a scheduled job and is set to run once a month by default.

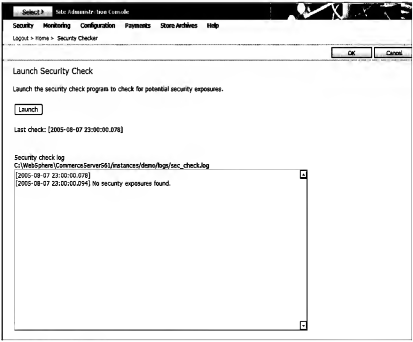


Figure 9-5 Security checker

To invoke the security check program:

1. From the Security menu, select **Security Checker**.
2. Click **Launch**.
3. After the program has run, click **OK** to close the page. You can view the results of the security check program in the file:

   wc_installdir/instance/*wc_instance_name*/logs/sec_check.log

9.2.5 Monitoring: View unsent messages

This page enables you to list unsent messages.

To display a list of unsent messages:

1. From the Configuration menu, select **View Unsent Messages**.

   The page shown in Figure 9-6 is displayed.

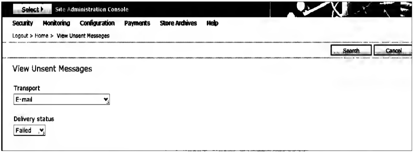


Figure 9-6 View Unsent Messages

2. Select a transport from the pull-down list.
3. Select the delivery status from the pull-down list.
4. Click **Search**.

   The Search Results - Unsent Messages list is displayed.

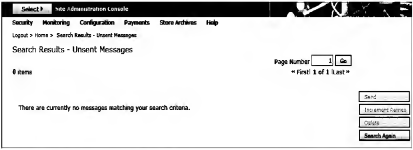


Figure 9-7 Unsent messages search results

From this page, you have the following options:

To view the contents of a message listed on the page, simply click the Message ID of the message to be viewed.

Send

Select a message and click **Send** to send the selected message immediately.

Increment Retries

Select a message and click **Increment Retries** to increase the number of retries by 1. After incrementing it by 1, the job scheduler will attempt to send the messages when the next scheduled job, SendTransactedMsg, is invoked.

Delete

Select a message and click **Delete** to remove the selected message from the MSGSTORE table.

Search Again

Click **Search Again** to search again.

9.2.6 Monitoring: View archived messages

This page (Figure 9-8) enables you to view and resend messages that have been sent previously. In order for messages to be displayed here, you must have selected the **Archive Message** check box when defining the message type.

To view sent messages:

1. From the Configuration menu, select **View Archived Messages**.

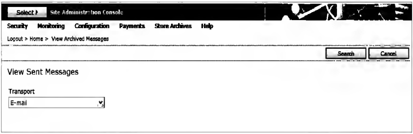


Figure 9-8 View Sent Messages

2. Select the desired transport type from the pull-down list.
3. Click **Search**.

   The search results page is displayed as depicted in Figure 9-9 on page 212.

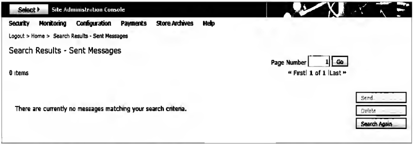


Figure 9-9 Archived messages search results

From this page, you have the following options:

To view the contents of a message listed on the page, simply click the Message ID of the message to be viewed.

Send

Select a message and click **Send** to send the selected message immediately.

Delete

Select a message and click **Delete** to remove the selected message from the MSGSTORE table.

Search Again

Click **Search Again** to search again.

9.2.7 Configuration: Transports

This page displays the name, description, and status of each configured transport method for the site.

Note: Although there is an Add button, you cannot add a transport because all supported transports are already listed by default.

Figure 9-10 on page 213 depicts the Transport Configuration page.

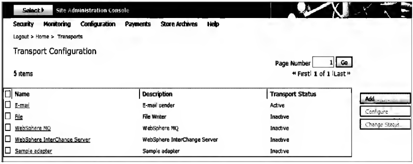


Figure 9-10 Transport Configuration

To configure an existing transport adapter:

1. From the Configuration menu, select **Transports**.
2. Select the check box next to the transport to be configured.
3. Click **Configure**.
4. Type the values to be used by the transport method.
5. Click **OK** to accept the changes, or click **Cancel** to return to the Transport Configuration page.

This list shows the parameters used for each of the available transport adapters:

- E-mail Adapter

  Host Specify the fully qualified host name. This field accepts up to 50 alphanumeric characters, but it is empty by default. To enable the transport, it must be filled in with an active SMTP server. This can be the host name or IP address.

  Port Specify the port number of the server. Default is `25`.

  Protocol Specify the protocol to use. The default value is `smtp`. This field accepts up to 50 alphanumeric characters.

  SendPartial Specify true or false. If `true`, the e-mail is sent to valid addresses in the Recipient field, even if the SMTP server detected problems with certain addresses in the same field. If false (default), the e-mail is not sent until all errors detected by the SMTP server are resolved. If member IDs are included as the target recipient list by the command, those without primary e-mail addresses will be ignored.

Retry Duration Specify the period in hours in which you wish to retry the connection to the server without decrementing the retry count. If the connection to the server is lost temporarily, this enables the system to retry the connection within a specified time period. After the period is expired, the retries count will be decremented as usual.

- File Adapter

  Location Specify the full path, local to the WebSphere Commerce Server. This field accepts up to 50 single-byte alphanumeric characters.

  File Name Specify the full file name, local to the WebSphere Commerce Server. This field accepts up to 50 single-byte alphanumeric characters.

  Mode Specify either 0 for append or 1 for overwrite.

- Adapter for WebSphere MQ

  Factory Specify the JMS name of the queue connection factory. This name must be the same as a connection factory defined using the WebSphere Application Server V5.0 Administrative Console. The default name is JMSQueueConnectionFactory.

  Inbound Queue Specify the JMS name of the inbound queue that is used to receive responses from outbound messages. This name must be the same as an inbound queue defined using the WebSphere Application Server V5.0 Administrative Console. The default name is JMSInboundQueue.

  Error Queue Specify the JMS name of the error queue in which messages that could not be processed are placed. This name must be the same as a queue defined using the WebSphere Application Server V5.0 Administrative Console. The default name is JMSErrorQueue.

  Outbound Queue Specify the JMS name of the outbound queue in which the outbound messages are placed. This name must be the same as an outbound queue defined using the WebSphere Application Server V5.0 Administrative Console. The default name is JMSOutboundQueue.

- Adapter for CrossWorlds®

  User Name Specify the user name for the system.

  Ior File Specify the name and location of the .ior file.

- Sample Adapter

User Name	Specify the user name for the connector. By default, this is userName.
Password	Specify the password for the connector. By default, this is password.

To activate a transport currently in Inactive status:

1. From the Configuration menu, select **Transports**.
2. Select the check box next to the inactive transport.
3. Click **Change Status**.

To deactivate a transport currently in Active status:

1. From the Configuration menu, select **Transports**.
2. Select the check box next to the active transport.
3. Click **Change Status**.

9.2.8 Configuration: Message types

This page (Figure 9-11) displays messages that have been configured for the site. Messages are displayed by message type, message severity, and transportation method.

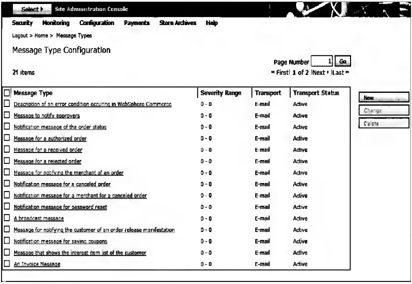


Figure 9-11 Message Type configuration

To add a new message type to the site:

1. From the **Configuration** menu, select **Message Types**.
2. Click **New**.
3. Complete the Message Transport Assignment page:
   a. Select the Message Type from the pull-down list.
   b. Enter 0, 0 in Message Severity.
   c. Select **Transport** from the pull-down list.
   d. Select Device Format from the pull-down list. (Most of the time, you will use **Standard Device Format**).
   e. Check the box next to **Archive Message after sent** if you want to save the sent messages.
4. Click **Next**.
5. Complete the required fields on the page.

   Note: For e-mails, you must enter an actual e-mail address in the Sender and Recipient fields. The CC, BCC, and Reply To fields are optional. If an e-mail address is entered, it must be valid.

6. Click **Finish**.

To change an existing message type on the site:

1. From the Configuration menu, select **Message Types**.
2. Select the check box next to the message type to change.
3. Click **Change**.
4. Make any needed changes and click **Next**.
5. Make any needed changes and click **Finish**.

To delete an existing message type from the site:

1. From the Configuration menu, select **Message Types**.
2. Select the check box next to the message type to change.
3. Click **Delete**. A confirmation dialog box will be displayed.
4. Click **OK** to confirm.

9.2.9 Configuration: Component configuration

On this page you can enable or disable WebSphere Commerce components. The page consists of a list of currently enabled components, a list of currently disabled components, and several control buttons.

Figure 9-12 depicts the Component Configuration page.

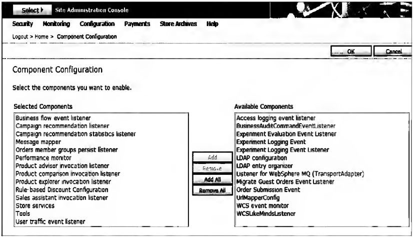


Figure 9-12 Component configuration

To enable a currently disabled component:

1. From the Configuration menu, select **Component Configuration**.
2. Select the component to be enabled from the Available Components list.
3. Click **Add**.
4. When you have made all of your changes, click **OK**.

To disable a currently enabled component:

1. From the Configuration menu, select **Component Configuration**.
2. Select the component to be disabled from the Selected Components list.
3. Click **Remove**.
4. When you have made all of your changes, click **OK**.

Note: Selecting **Add All** moves all entries from the Available Components list to the Selected Components list. **Remove All** moves all entries from the Selected Components list to the Available Components list.

9.2.10 Configuration: Scheduler

This page lists the status of jobs currently scheduled to run for your site. By default, the rows are sorted alphabetically by command name. The sort sequence can be changed by clicking on the desired column in the list header. The available columns include:

Command	The name of the command that executes for this job.
State	The current status of the job: running, completed, or inactive.
Status	The result of the job: successful or failed.
Start Date	The date and time the job started running. If the job has not yet run, this field is empty.
Finished	The date and time the job finished running. If the job has not yet run, this field is empty.
Application Type	The type of application used to run the job.

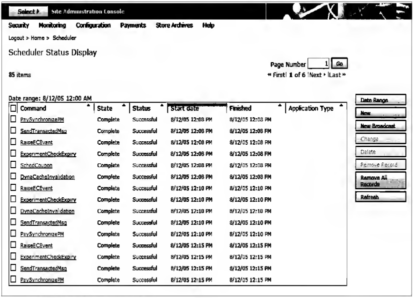


Figure 9-13 Scheduler Status Display

To change the date range for the Scheduler Status Display:

1. From the Configuration Menu, select **Scheduler**.

2. Click **Date Range**.
3. Enter a start date and, optionally, enter a start time. If a start time is not entered, 12:00 AM will be used.
4. Enter an end date and, optionally, enter an end time. If an end time is not entered, 12:00 PM will be used.
5. Click **Display Results**.

To refresh the current display, click **Refresh** on the Scheduler Status display page.

Create a new scheduled job

1. From the Configuration menu, select **Scheduler**.
2. Click **New**.
3. Complete the job parameters based on the following definitions:

Job Command	Select the URL-based command that you want to run.
Job Parameters	The queryString of the command that is to be run. All special characters, such as &, =, /, and ?, must be encoded using standard HTML coding. If you use the form provided, encoding will be done for you.
Start date	The date this job should start running.
Start time	The time this job should start running. The time must be entered in the 24-hour-clock format.
Associated user	The user on whose behalf this job is run. By default, the user ID of the current user is entered in this field. It may be replaced by typing in another user ID. This parameter is stored in the LOGONID column of the USERREG table.
Allowed host	The name of the host that is allowed to run this job. If this parameter is omitted, the job can be run by any host. This parameter is needed only if the scheduler is running on multiple hosts. The host name should be in the `name.domain` format.
Schedule interval	The number of seconds between successive runs of this job. If this parameter is omitted, the job is run only once.
Job attempts	The number of times the scheduler retries the job if it fails. Use this parameter with the Seconds to retry parameter. Both parameters must be present to retry the job.

Seconds to retry	The number of seconds before a failed job is retried. Use this parameter together with the Job Attempts parameter. Both parameters must be present to retry a job.
Scheduler policy	Specifies the policy to be used by the scheduler when the job has failed to run. Two possible values are defined: 0 - The job is run only once and the next run is scheduled for the future; this is the default. 1 - The job is run as many times as necessary to recover all missed runs.
Job priority	The number associated with the priority of the job. This value is inserted into the SCCPRIORITY column of the SCHCONFIG table. A greater number indicates a higher-priority job.
Application type	The application schedule pool that the job will be part of. The purpose of this parameter is to constrain resource-intensive jobs to a limited number of threads. The default application type is null.

4. Click **OK**.

Create a new broadcast job

1. From the Configuration menu, select **Scheduler**.
2. Click **New Broadcast**.
3. Complete the job parameters based on the following definitions:

Job Command	Select the URL-based command that you want to run.
Job Parameters	The queryString of the command that is to be run. All special characters, such as &, =, /, and ?, must be encoded using standard HTML coding. If you use the form provided, encoding will be done for you.
Associated user	The user on whose behalf this job is run. By default, the user ID of the current user is entered in this field. It may be replaced by typing in another user ID. This parameter is stored in the LOGONID column of the USERREG table.

4. Click **OK**.

Change a selected job

To change a selected job, the job state must be Inactive and the Status must be empty.

1. From the Configuration menu, select **Scheduler**.
2. Select the check box next to the job record to change.
3. Click **Change**.
4. Make any needed changes.
5. Click **OK**.

Delete a selected job

To delete a selected job, the job state must be Inactive and the Status must be empty.

1. From the Configuration menu, select **Scheduler**.
2. Select the check box next to the job record to delete.
3. Click **Delete**.
4. Click **OK** on the displayed dialog box.

Remove a record

Remove a selected job status record from the displayed list and the SCHSTATUS table. To record a job status record, the Status field must contain either Successful or Failed.

1. Select the check box next to the job status record to be removed.
2. Click **Remove Record**.
3. Click **OK** on the displayed dialog box.

Remove all records

Remove all job status records displayed in the list and the SCHSTATUS table.

1. Click **Remove All Records**.
2. Click **OK** on the displayed dialog box

Note: This will take some time to complete.

9.2.11 Configuration: Registry

The Registry Manager maintains a set of registries for caching WebSphere Commerce runtime data. If the data in the tables that are associated with a registry is changed, you will have to refresh that registry for the change to take effect. For example, if a new entry is added to the URLREG table, the UrlRegistry

has to be refreshed. Otherwise, the WebSphere Commerce runtime environment will not recognize the new URL.

The Registry Manager can manage any registries registered to it, including customer-created registries. You can register a registry with the Registry Manager by defining a new registry under the registries node in the *wc_instance_name*.xml file.

To update registry components:

1. From the Configuration menu, click **Registry**. This displays a list of registry components for the site (Figure 9-14).

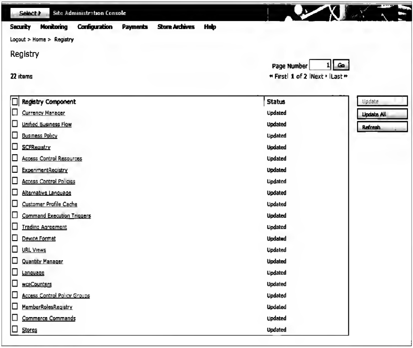


Figure 9-14 Registry

2. Do one of the following:
   - Select the check box for the registry component to update and click **Update**. The Registry window reloads, listing the status for the selected components as Updating.

– Click **Update All** to update all of the listed Registry components. The Registry window reloads, listing the status for all components as Updating.

3. Click **Refresh** to reload the Registry window and check on the status of the components that you are updating. When updating is complete, the status column reads Updated.

9.2.12 Configuration: Product information

The purpose of this function is to display the current revision levels of the major components of the WebSphere Commerce implementation:

- IBM WebSphere Commerce Server
- Database
- Application Server

It reads this information from a database table that should be updated at product installation and whenever a fix pack is installed. It was our experience that the information displayed on this page is not accurate.

Do not rely on the information displayed on this page.

Note: Optionally, you can access all of the Payments functions from the WebSphere Commerce Payments User Interface by accessing this URL from a browser:

```
https://host_name:5433/webapp/PaymentManager/PaymentServerUI/Start
```

The descriptions in this book utilize the Administration Console.

The payments pages include three navigation icons.

Figure 9-15 Payments page navigation icons

The icons, from left to right, are used to:

 Refresh the existing page.

 Return to the previous page.

 Display help for the current page.

9.2.13 Payments: Users

To define Payments roles to existing WebSphere Commerce user accounts:

1. From the Payments menu, select **Users** to open the page in Figure 9-16.

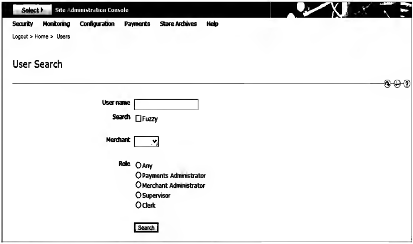


Figure 9-16 User search

2. Enter search criteria and click **Search**. The Users list page is displayed.

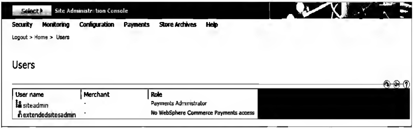


Figure 9-17 Payments users

3. Click the link for the selected user to change their role.
4. If the user is assigned to the Payments Administrator role, do not select any merchants; otherwise, select one or more merchants from the pull-down list.
5. Select the appropriate Payments role for the user by clicking a radio button.
6. Click **Update**.

9.2.14 Payments: Merchant settings

To maintain Payments Merchant settings:

1. From the Payments menu, select **Merchant Settings** to open the page shown in Figure 9-18.

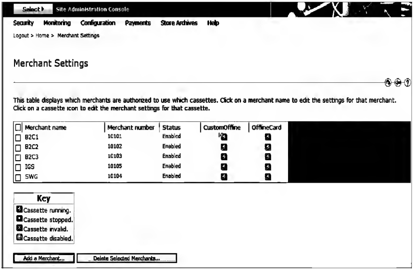


Figure 9-18 Merchant Settings

2. Click your Merchant name to edit the available settings for that merchant.

   The Merchant Settings page for your selected merchant displays. Use this page to change the authorized cassettes.

3. Select **Update** to accept the change. A message appears, indicating whether the update was successful. Select **Disable Merchant** to stop the merchant from accepting any more payments.
4. Click the arrow icon to return to the Merchant Settings page.

To edit the merchant settings for the cassette:

1. Click the cassette icon in the OfflineCard column. The OfflineCard Cassette page displays.
2. Click **Merchant Cassette Settings** to start or stop the merchant cassette.
3. Click **Accounts** to create, update, or delete accounts.
4. Click the arrow icon to return to the desired page.

9.2.15 Payments: Payment settings

This page enables you to change the WebSphere Commerce Payments host name or disable WebSphere Commerce Payments.

9.2.16 Payments: Cassettes

Use the Cassettes page to view which cassettes are installed and configured for WebSphere Commerce Payments.

Click a cassette icon to go to the cassette's settings page where you can:

- Start or stop the cassette.
- Update the cassette's settings.

9.2.17 Store Archives: Publish

The main focus of this book is the utilization of the ExtendedSites sar that comes with the WebSphere Commerce V5.6.1 Business Edition. Instructions for publishing the ExtendedSites.sar file are included in 5.1, "Publish procedure" on page 86.

9.2.18 Store Archives: Publish Status

See 5.1, "Publish procedure" on page 86 for details about the Publish Status functionality.

9.3 Organization Administration Console

The Organization Administration Console enables you and the buyer's administrators to control the organizations that access your site or store. Tasks that you are authorized to perform in your role are displayed on the Organization Administration Console home page menus. These tasks are based on user roles and authority levels, which are defined in XML files on your WebSphere Commerce system and are assigned by the Site Administrator by using the Administration Console. To return to the Organization Administration Console home page, click the Home link at the top right of the screen.

Note: Ensure that you log off of the Organization Administration Console before you log on to another Administration tool (such as the WebSphere Commerce Accelerator or the Administration Console). If you access another tool without first logging out of the Organization Administration Console, any unsaved work will be lost and an error message will be displayed.

To start the Organization Administration Console:

1. Access the following URL in your browser:

   `https://host_name:8004/orgadminconsole`

   host_name is the fully qualified TCP/IP name of your WebSphere Commerce Server.

2. From the Logon page, type your site administrator ID and password and click **Log On**.

   The Organization Administration Console home page displays as depicted in Figure 9-19.

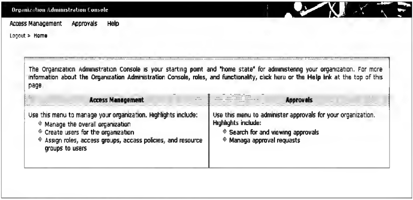


Figure 9-19 Organization Administration Console

The Organization Administration Console contains two submenus for maintaining the access control environment within WebSphere Commerce:

- Access Management
  - Users
  - Organizations
  - Roles
  - Access Groups
  - Policies
  - Resource Groups
  - Action Groups
- Approvals
  - Approval Requests
  - Find Approval Requests

9.3.1 Access Management: Users

With this menu option, you can add new users, change user information, change the roles assigned to users, and add or exclude users from member groups. (You can manipulate user information only for the organizations to which you have access.)

> **Note:** You cannot delete a user account from this page. To delete a user, mark the account as disabled and run the database cleanup routine to remove disabled accounts. (See 9.4.5, "Database cleanup" on page 253.)

Figure 9-20 depicts the Users page after publishing the Extended Sites store archive. The siteadmin user account was created when the instance was created. The extendedsitesadmin user account was created when the store archive was published.

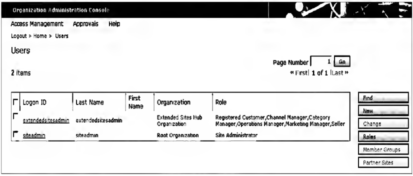


Figure 9-20 Organization Administration Console - Users

The following sections list steps required to perform specific functions from the Users page.

Find

When you open the Users page, a list of all user accounts to which you have access is displayed. To search for particular users:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Users**.
3. Click **Find** to display a find dialog.
4. Provide any or all of the following user information:
   a. In the Last name field, type all or part of the user's last name.

b. Select the user's role from the Roles list.

c. In the Parent organization field, type the name of the top-level organization or organizational unit to which the user belongs.

5. Click **Find**.

The system performs a fuzzy search and a list of users that match the search criteria displays. The list shows each user's logon ID, last name, first name, organization, and role.

New

To create a new user:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Users**.
3. Click New. The Details page displays.

   Note: On the Details page, the Challenge question and Answer to challenge question fields display only if <OrgAdminConsole ShowChallengeInformation="true" /> has been set in *<wc_installdir>*/instances/*<instance_name>*/xml/*<instance_name>*.xml.

4. Provide appropriate information for the fields and click **OK** when complete.

The Users page is displayed with the new user added to the list. You must add roles to the user before he can actually do anything.

Change

To change user information:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Users**.
3. Select one and only one user by clicking the check box next to the user name on the displayed list.
4. Click **Change**. The Details page displays.

   Note: You are not allowed to change the logon ID for a user.

5. Change the appropriate information for the fields and click **OK** when complete. The Users page is displayed.

Roles

To add or remove roles from a selected user:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Users**.
3. Select one and only one user by clicking the check box next to the user name on the displayed list.
4. Click **Roles**.

   The Roles page displays.

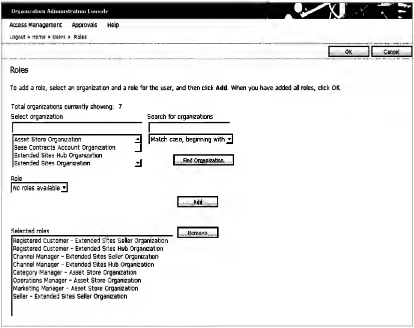


Figure 9-21 User roles

5. From the Organization pull-down list, select the organization for which this user will play a role.
6. From the Role pull-down list, select the role for the user.
7. Click **Add**.

   The role and organization combination displays in the Selected roles list.

8. If you make an error or want to remove a role, select the role and organization combination in the Selected roles list and click **Remove**.

   The role and organization combination moves from the Selected roles list and the user is no longer assigned this role.

9. Click **OK** after you have defined all roles for the user.

Member Groups

To include or exclude a selected user from a member group:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Users**.
3. Select one and only one user by clicking the check box next to the user name on the displayed list.
4. Click **Member Groups**. The Member Groups notebook displays.
5. To assign the user a single member group, select the group in the Available member groups list and click **Add**. The group moves from the Available member groups list to the Selected member groups list. Repeat this step for all member groups you want to assign to the user.
6. If you make an error or want to remove a member group, select the role in the Selected member groups list and click Remove. The group moves from the Selected member groups list to the Available member groups list. Repeat this step for all the member groups you want to remove from the user.
7. To exclude a user from one or more member groups, click the **Exclude** tab.
8. To exclude the user from a single member group, select the group from the Available member groups list and click **Add**. The group moves from the Available member groups list to the Selected member groups list. Repeat this step for all the member groups you want to assign to the user.
9. If you make an error or want to remove a member group, select the role from the Selected member groups list and click **Remove**. The group moves from the Selected member groups list to the Available member groups list. Repeat this step for all member groups you want to remove from the user.
10. Click **OK** when complete.

Partner Sites

This option is not relevant to Extended Sites.

9.3.2 Access Management: Organizations

This menu option enables you to maintain the organizational structure within WebSphere Commerce.

Figure 9-22 depicts the Organizations page after publishing the Extended Sites store archive. The Default Organization and Root Organization are created when the WebSphere Commerce instance is created. The following organizations are created when the Extended Sites store archive is published:

- Extended Sites Seller Organization
- Extended Sites Organization
- Asset Store Organization
- Base Contracts Account Organization
- Extended Sites Hub Organization

The Extended Sites Seller Organization1 was created from building a customer facing store using the Store Creation Wizard.

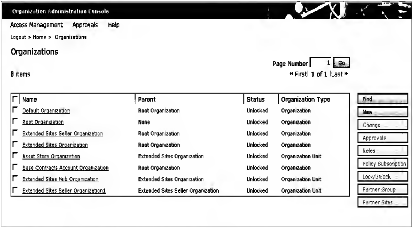


Figure 9-22 Organization Administration Console - Organizations

The following sections provide the steps required to perform specific functions from the Organizations page.

Find

When you access the Organizations page, a list of all organizations to which you have access is displayed. To search for particular organizations:

1. Open the Organization Administration Console.

2. Select **Access Management** → **Organizations**.
3. Click **Find**.

   A find dialog displays.
4. Provide any of the following information. At least one field must be specified.
   a. In the Name field, type all or part of the organization name.
   b. In the Parent organization field, type the name of the top-level organization or organizational unit to which the user belongs.

      You can also click **Find** next to the Parent organization field. This displays an organization list. Check the box next to an organization in the list and click **Select**.
5. Click **Find**.

   The system performs a fuzzy search and displays a list of organizations that match the search criteria, showing the organization's name, parent, status, and organization type.

New

To create a new organization or organization unit:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Organizations**.
3. Click **New**. The Details page displays.
4. Provide appropriate information for the fields.
5. Click **OK** when complete.

The Organizations page displays with the new organization added to the list. You must add roles to the organization before users can be added to it.

Change

To change information about an organization or organization unit:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Organizations**.
3. Select one and only one organization by checking the box next to the organization name on the displayed list.
4. Click **Change**. The Details page displays.

   Note: You may not change the Short name, Organization type, or parent organization.

5. Change the appropriate information for the fields and click **OK** when complete.

The Organizations page is displayed.

Approvals

With this menu option, you can select which approvals will be required for a specific organization or organization unit. To update the approvals for an organization:

1. Open the Organization Administration Console.
2. Select **Access Management → Organizations**.
3. Select one and only one organization by checking the box next to the organization name on the displayed list.
4. Click **Approvals**. The Approvals page displays.
5. To add an approval, select it from the Available approvals list and click **Add**. The approval will be removed from the Available approvals list and added to the Selected approvals list.
6. You can also click **Add All** to add all available approvals to the Selected Approvals list.
7. To remove an approval, select it from the Selected approvals list and click **Remove**.
8. You can also click **Remove All** to remove all approvals from the Selected approvals list.
9. Click **OK** when complete.

Roles

With this menu option, you can assign roles to an organization or organizational unit that can later be assigned to users. For more information about roles within WebSphere Commerce, see 2.7.2, "Roles" on page 44.

To update the roles associated with an organization or organizational unit:

1. Open the Organization Administration Console.
2. Select **Access Management → Organizations**.
3. Select one and only one organization by checking the box next to the organization name on the displayed list.
4. Click **Roles**. The Roles page displays.
5. To add a role, select it from the Available roles list and click **Add**. The role is removed from the Available roles list and added to the Selected roles list.

6. You can also click **Add All** to add all available roles to the Selected roles list.
7. To remove a role, select it from the Selected roles list and click **Remove**.
8. You can also click **Remove All** to remove all roles from the Selected approvals list.
9. Click **OK** when complete.

Policy Subscription

This menu option enables you to select which policy groups are associated with an organization or organizational unit. For more information about policy groups, see 2.7.3, "Access control policy" on page 48.

To update the policy subscription for an organization or organizational unit:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Organizations**.
3. Select one and only one organization by checking the box next to the organization name on the displayed list.
4. Click **Policy Subscription**. The Policy Subscription page displays.
5. To add a policy group, select it from the Available policy groups list and click **Add**. The role is removed from the Available policy groups list and added to the Selected policy groups list.
6. To remove a policy group, select it from the Selected policy groups list and click **Remove**.
7. Click **OK** when complete.

Lock/Unlock

Locking an organization or organization unit prevents users assigned to that organization from logging in. The default status is Unlocked.

To change the status:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Organizations**.
3. Select one and only one organization by checking the box next to the organization name on the displayed list.
4. Click **Lock/Unlock**. The Status page displays.
5. Select the appropriate status from the Status list.
6. Click **OK** when complete.

Partner Group

This option is not relevant to Extended Sites.

Partner Sites

This option is not relevant to Extended Sites.

9.3.3 Access Management: Roles

This menu option enables you to create a new role that can then be assigned to organizations and finally to users. To create a new role:

1. Open the Organization Administration Console.
2. Select **Access Management** → **Roles**.
3. Click **New**.
4. Enter a name for the new role.
5. Enter a description of the role.
6. Click **OK**.

After the role has been created, create an access control policy for the new role. See 9.4.1, "Create a new role-based access control policy" on page 241 for information about how to complete this task.

9.3.4 Access Management: Access Groups

An access group is a group of members defined specifically for access control purposes. This menu option enables you to manipulate access groups within WebSphere Commerce.

Figure 9-23 on page 237 depicts the Access Groups page. You can navigate through the list using the controls or select an action from the available buttons.

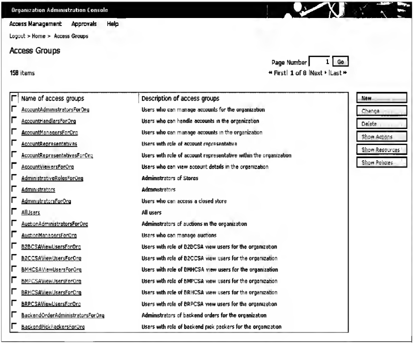


Figure 9-23 Organization Administration Console - Access Groups

9.3.5 Access Management: Policies

This option is available to users with site administration authority to view access control policy information. To display a list of access control policies owned by an organization, select an organization from the list. Figure 9-24 on page 238 shows the policies owned by the Extended Sites Hub Organization.

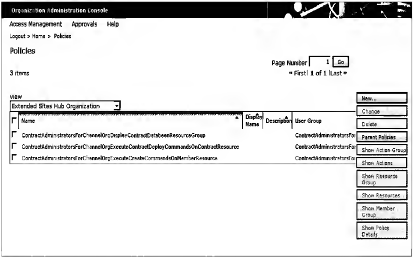


Figure 9-24 Organization Administration Console - Policies

From this page, you can:

- Create a new policy by clicking **New**.
- Change an existing policy by selecting it from the list and clicking **Change**.
- Delete an existing policy by selecting it from the list and clicking **Delete**.
- Display the policies owned by the parent of the selected organization by clicking **Parent Policies**.
- Display the action groups related to a policy by selecting a policy from the list and clicking **Show Action Groups**.
- Display the actions related to a policy by selecting a policy from the list and clicking **Show Actions**.
- Display the resource group related to a policy by selecting a policy from the list and clicking **Show Resource Group**.
- Display the resources related to a policy by selecting a policy from the list and clicking **Show Resources**.
- Display the member group related to a policy by selecting a policy from the list and clicking **Show Member Group**.
- Display the policy details by selecting a policy from the list and clicking **Show Policy Details**.

9.3.6 Access Management: Resource Groups

This option is available to users with site administration authority to maintain resource groups. The options available from this page are:

- Create a new resource group.
- Change an existing resource group.
- Delete a resource group.
- Display the resources contained in a resource group.
- Display the action groups assigned to a resource group.
- Display the policies related to this resource group.

9.3.7 Access Management: Action Groups

This option is available to users with site administration authority to maintain action groups. The options available from this page are:

- Create a new action group.
- Change an existing action group.
- Delete an action group.
- Display the actions contained in an action group.
- Display the resource groups assigned to an action group.
- Display the policies related to this action group.

9.3.8 Approvals: Approval Requests

This option lists the approvals that are awaiting input for the user who is logged in. The available options\ are:

- Approve
- Reject
- Summary
- Find

Approve or reject an approval request

To approve or reject an approval request without viewing the details of the request:

1. Open the Organization Administration Console.
2. Select **Approvals** → **Approval Requests**.
3. Select the approval requests that you want to approve and click **Approve** or select the approval requests that you want to reject and click **Reject**.

   The system processes the requests and they are removed from the list.

View request summary

To view the request details before making an approval or rejection decision:

1. Open the Organization Administration Console.
2. Select **Approvals** → **Approval Requests**.
3. Select one and only one approval request from the list and click **Summary**.
4. Review the information provided and click either **Approve** or **Reject**. The approval request list is displayed.

Find approval requests

To search for specific approval requests:

1. Open the Organization Administration Console.
2. Select **Approvals** → **Approval Requests**.
3. Click **Find**.
4. Enter at least one of the search criteria:
   a. Request Number
   b. Select an initiating process from the list:
      - RFQ Response
      - Order Processing
      - Contract Submit
      - User Registration
      - Reseller Organization Registration

      Note: The contents of this list is dependent on the approvals that are defined in WebSphere Commerce for the organization as well as the role assigned to the user.

   c. Submitter
   d. Status (Pending, Approved, Rejected)
   e. Date created
5. Click **Find**.

The approval request list is displayed with all of the requests that match the search criteria.

9.3.9 Approvals: Find Approval Requests

This option is the same as the option just defined in "Find approval requests."

9.4 Tasks

The previous section of this chapter provided an overview of several tools that are available to the site administrator. This section focuses on some specific tasks that a site administrator performs. The discussion of each task includes an overview of the task and provides the steps required to complete the task.

This is not meant to be a complete list of all tasks that a site administrator is required to perform but merely a guide to completing some of the major tasks. The tasks discussed in this section include:

- Create a new role-based access control policy
- Payments administration
- Monitor performance
- Dynamic caching
- Database cleanup
- Logging and tracing

9.4.1 Create a new role-based access control policy

To create a new role-based policy for a new role, you can use the Organizational Administration Console for some subtasks; however, you have to load some of the changes manually through the use of access control policy XML files:

1. Use the Organizational Administration Console to create an access group for the new role. See 9.3.4, "Access Management: Access Groups" on page 236.
2. Use the Organizational Administration Console to create a resource group and assign commands that this role can execute. See 9.3.6, "Access Management: Resource Groups" on page 239.
3. Use the Organizational Administration Console to create an access control policy with the following parameters (see 9.3.5, "Access Management: Policies" on page 237):
   a. Specify the new access group created in step 1 as the User Group.
   b. Specify `ExecuteCommandActionGroup` as the Action Group.
   c. Specify the new resource group created in step 2 as the Resource Group.
4. Manually, create an access control XML file for your policy and associate the new policy to a policy group as described in "Associate policies with policy groups" on page 242.
5. Manually, update the XML file created in step 4 to modify the resource-level access control for the policy. See "Modifying the resource-level access control of an existing policy" in the WebSphere Commerce Information Center:

   `http://www.ibm.com/software/webservers/appserv/infocenter.html`

6. After completing the changes to your policy, load the policy into the database as described in “Loading access control policy definitions and other policy-related elements” in the WebSphere Commerce Information Center.

   Note: The WebSphere Commerce Organization Administration Console enables you to make simple changes to access control policies and their parts. To make more sophisticated changes, you have to edit the XML files directly and load them into the database.

Associate policies with policy groups

Policies can belong to multiple policy groups. However, to ease administration of policies, it is recommended that a policy belong to only one policy group. This association should be defined in an XML file, similar to defaultAccessControlPolicies.xml, then loaded into the database. Here is a sample definition:

```
<PolicyGroup Name="aValue" OwnerID="aValue">
  <PolicyGroupPolicy  Name="aValue" PolicyOwnerID="aValue" />
</PolicyGroup>
```

In this syntax:

PolicyGroupPolicy Name is the name of the policy, previously defined, to be associated with the specified policy group. This policy must have one of the following policy types: groupableStandard or groupableTemplate.

PolicyGroupPolicy PolicyOwnerID (optional) is the member ID of the organizational entity that owns the specified policy. If this parameter is not specified, the default value is OwnerID of the policy group. Two special values are recognized by the transformer tool, `RootOrganization: -2001` and `DefaultOrganization: -2000`.

9.4.2 Payments administration

When the WebSphere Commerce instance is created, you define a site administrator. This site administrator is automatically granted the role of Payments Administrator. The functions of the Payments Administrator role are available on the Site Administration console. The specific menu options are discussed in previous sections of this chapter:

- “Payments: Users” on page 224
- “Payments: Merchant settings” on page 225
- “Payments: Payment settings” on page 226
- “Payments: Cassettes” on page 226

9.4.3 Monitor performance

This section is comprised of an overview of the features and process, followed by an example performed on our test server.

Overview

You can monitor the performance of your WebSphere Commerce system using the WebSphere Application Server Performance Monitoring Infrastructure (PMI).

The function of the previous WebSphere Commerce performance monitor is now transferred to the WebSphere Commerce PMI module. Performance data can then be monitored and analyzed with a variety of tools that are available from WebSphere Application Server. Site Administrators can use the information gathered from the tools to detect performance problems and analyze performance trends. The tools can be used for measuring the performance of a WebSphere Commerce application server from a local or remote machine.

The WebSphere Commerce application server gathers statistics for URLs, tasks, and JSPs. Each data key has an associated set of counters that provide the following information:

- Average response time
- Last response time
- Minimum response time
- Maximum response time
- Hits
- Total response time
- Standard deviation

To set up PMI (see "Monitoring performance" in the WebSphere Application Server Information Center):

1. Enable performance monitoring services in the application server through the administrative console. Enable performance monitoring services in the *node agent* through the administrative console if running WebSphere Application Server Network Deployment. To monitor performance data through the PMI interfaces, you must first enable the performance monitoring service through the administrative console and restart the server. If running in Network Deployment, enable PMI services on both the server and on the node agent, then restart the server and the node agent.
2. Enable performance monitoring services in the NodeAgent through the administrative console. To monitor performance data through the PMI interfaces, you must first enable the performance monitoring services through the administrative console and restart the server. If running the Network Deployment product, enable PMI service on both the server and on the node agent and restart the server and the node agent.

3. Collect the data. The monitoring levels that determine which data counters are enabled can be set dynamically, without restarting the server. This can be done in one of the following ways:
   - Enable data collection through the administrative console.
   - Enable performance monitoring services through Tivoli® Performance Viewer (formerly Resource Analyzer).
   - Enable performance monitoring services using the command line.
4. Monitor and analyze performance data using any of several tools:
   - Tivoli Performance Viewer (included with WebSphere Application Server)
   - Other Tivoli monitoring tools
   - User-developed monitoring tools (or write your own applications)
   - Third-party monitoring tools

Example

1. Start the WebSphere server by opening a command line window, changing to the directory *WAS_installdir*/bin, and entering the following command:

   ```
   startServer server1
   ```

2. Start the WebSphere Administrative Console: **Start** → **Programs** → **IBM WebSphere** → **Application Server V5.0** → **Administrative Console**.
3. Enter a user ID and click **OK**.
4. Click **Servers** → **Application Servers** in the console navigation tree.
5. Click the WebSphere Commerce server (in our case, WC_demo).
6. Click the **Configuration** tab.
7. When in the Configuration tab, settings will apply when the server is restarted. When in the Runtime Tab, settings will apply immediately. You can enable Performance Monitoring Service only in the Configuration tab.
8. Click **Performance Monitoring Service** under Additional Properties. (You have to scroll down to see this.)
9. Select the check box for **Startup**.
10. Select the radio button for **Standard** to set the initial specification level field.
11. Click **Apply**.
12. Click **Save** on the top menu bar.
13. Click the **Save** button to save the Master Configuration.
14. Log off of the Administrative Console.
15. Close the Administrative Console.

16. Restart the WebSphere Commerce server as described in "Starting and stopping servers" on page 476.

17. Start the WebSphere server by opening a command line window, changing to the *WAS_installdir*/bin directory, and entering the following command:

```
startServer server1
```

18. Start the Tivoli Performance Viewer by opening a command line window, changing to the *WAS_installdir*/bin directory, and entering this command:

```
tperfviewer.bat localhost 8881 SOAP
```

Note: When the Tivoli Performance Viewer (TPV) starts, you will see an error message indicating that one or more servers cannot be viewed. TPV can look at only one application server at a time. If you want to look at server1, use the default port of 8879 in the above command.

19. Set monitoring levels.

Figure 9-25 depicts the Current Activity Settings. To change them, select the appropriate radio button (**Standard**) and click **Apply**.

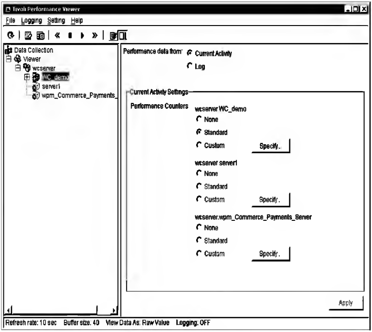


Figure 9-25 Tivoli Performance View: Current Activity Settings

20. To view summary reports (Figure 9-26), double-click the server name (in our case WC_demo). You can click any of the other tabs to view additional information, or expand the individual items in the navigation tree to see detailed information.

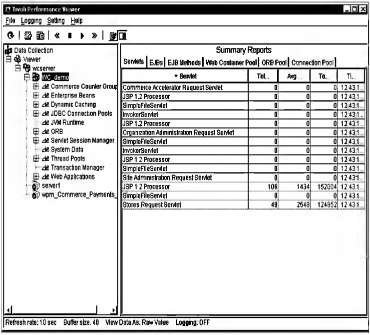


Figure 9-26 Tivoli Performance Viewer: Summary Reports

Note: To stop performance monitoring, repeat steps 1 on page 244 through 16 on page 245. This time, uncheck the Startup check box described in step 9.

9.4.4 Dynamic caching

This section describes the dynamic caching of WebSphere Commerce servlet or JSP results.

WebSphere Commerce servlet or JSP result caching

When a customer clicks a link to view a product or category page, most of the response time is spent parsing the HTTP request, accessing the database, and dynamically creating the page. Heavy site traffic and many product and category

entries in the database can further increase the time it takes for servlets or JSP files to load.

Most HTTP requests on the server are for catalog information. The WebSphere Commerce commands `CategoryDisplay`, `ProductDisplay`, `TopCategoriesDisplay`, and `StoreCatalogDisplay` retrieve information from your database and display the result as a JSP page. If the catalog information has not changed since it was last viewed, the servlet or JSP file does not have to be re-executed the next time a customer requests it. Serving an equivalent static servlet or JSP file stored in a cache would be faster. Caching of the servlet or JSP can be constructed by defining cache-entry elements in the cachespec.xml file located in the WEB-INF directory of the Web module.

If the cache entry corresponding to the page being accessed is not in memory, it will be generated dynamically. The page is then stored to memory and will not have to be regenerated until the data it is based on is modified.

> **Note:** WebSphere Commerce dynamic caching and URL rewriting cannot interoperate. With URL rewriting turned on, disable WebSphere Commerce dynamic caching and you should not cache your servlet or JSP files. For more information about URL rewriting, see the chapter about session management in the *WebSphere Commerce Security Guide*.

WebSphere Application Server dynamic cache

WebSphere Commerce utilizes the WebSphere Application Server dynamic cache service for caching servlets or JSP files and commands that extend from the WebSphere Application Server CacheableCommand interface. The dynamic cache service, servlet caching, and disk offload are enabled by default, during the creation of a WebSphere Commerce instance.

For more information about the WebSphere Application Server dynamic cache, search for the topic "Improving performance through the dynamic cache service" in the WebSphere Application Server Information Center at:

`http://www.ibm.com/software/webservers/appserv/infocenter.html`

Dynamic cache

Caching the servlet or JSP file results improves application performance. WebSphere Application Server consolidates several caching activities, including servlets, Web services, and WebSphere commands into one service called the dynamic cache. These caching activities work together to improve application performance, and they share many configuration parameters, which are set in an application server's dynamic cache service.

You can use the dynamic cache to improve the performance of servlet and JSP files by serving requests from an in-memory cache. Cache entries contain servlet output, results of servlet execution, and metadata.

Enabling the dynamic cache service and servlet caching

To enable caching, you should enable the dynamic cache service and configure servlet caching. For information about performing these steps, see the topics "Enabling globally the dynamic cache service" and "Configuring servlet caching" in the document at:

`http://www.ibm.com/support/docview.wss?uid=swg1PQ77061`

Enabling the Dynamic Cache Monitor

WebSphere Application Server provides a Dynamic Cache Monitor application for displaying cache statistics, Edge Side and disk statistics, cache entries, dependency IDs, and cache policy information. To inspect the contents and behavior of the WebSphere Application Server dynamic cache, you should install the WebSphere Application Server Dynamic Cache Monitor. To use the Dynamic Cache Monitor, install the CacheMonitor.ear file, located in the installableApps subdirectory under the *WAS_installdir* directory, on each application server that uses dynamic caching.

For WebSphere Commerce, it is recommended that you use the virtual host VH_*instance_name*_admin (for example, VH_demo_admin) instead of VH_*instance_name* for the Dynamic Cache Monitor, for security reasons. You can add or change virtual host names from the WebSphere Application Server Administrative Console. You can access the Web application using a Web browser with the following address:

```
http://host_name:port/cachemonitor
```

However, for a more secure access, it is recommended that you access the Administration host machine:

```
https://admin_host_name:port/cachemonitor
```

For example, if the virtual host VH_*instance_name*_admin is used for installing the Cache Monitor, then the Cache Monitor can be accessed as:

```
https://admin_host_name:8002/cachemonitor
```

Notes:

- You must launch one dynamic cache monitor for every WebSphere Commerce instance.
- If you have WebSphere Application Server EJB security enabled and you want to use the Cache Monitor, you have to perform some additional setup, as documented in the section "Security configuration for the Dynamic Cache Monitor" in the *WebSphere Commerce Security Guide*.

For more information about installing the Dynamic Cache Monitor, search for the topic "Displaying cache information" in the WebSphere Application Server Information Center.

Configuring cacheable objects

Cacheable objects are defined in the cachespec.xml file, which is found in the Web application archive (WAR) WEB-INF or enterprise bean WEB-INF directory. You can place a global cachespec.xml file into the application server properties directory, but the recommended method is to place the cache configuration file with the deployment module. The root element of the cachespec.xml file is <cache>, which contains <cache-entry> elements.

To specify the cache entry for servlet or JSP result caching, add the following section to the cachespec.xml file:

```
<cache-entry>
<class>servlet</clas>
<name>name</name>
...
</cache-entry>
```

name is the relative Web path or servlet mapping of the servlet or JSP.

To specify the cache entry for command caching, add the following section to the cachespec.xml file:

```
<cache-entry>
<class>command</clas>
<name>name</name>
...
</cache-entry>
```

name is the complete path to the command class. For example: com.ibm.commerce.dynacache.commands.MemberGroupsCacheCmdImpl

Note: For this release, only command invalidation is supported.

Within a <cache-entry>...</cache-entry> element, you can develop cache-ID, dependency-ID, and invalidation rules. To cache an object, WebSphere Application Server has to be able to generate unique IDs for different invocations of that object. The <cache-id> element performs this task. Each cache entry can have multiple cache-ID rules that execute in order until either a rule returns a non-empty cache-ID or no more rules remain to execute. If none of the cache-ID generation rules produces a valid cache ID, then the object is not cached.

The dynamic cache responds to changes in this file. When new versions of cachespec.xml are detected, the old policies are replaced. Objects cached through the old policy file are not automatically invalidated from the cache. They are either reused with the new policy or eliminated from the cache through its replacement algorithm. For more information about the cachespec.xml file, see "Cachespec.xml file" in the WebSphere Application Server Information Center.

Caching defaults

During installation, WebSphere Commerce sets up the caching system with the following defaults:

- Dynamic caching is enabled.
- Disk offload is enabled.
- Servlet caching is enabled.
- Default cache policies (supplied as samples) for each business model caches the JSP files for the following display commands:
  - CategoryDisplay
  - ProductDisplay
  - StoreCatalogDisplay
  - TopCategoriesDisplay

Manually merge the cache entry from:

wc_installdir\samples\dynacache\HostingESites\cachespec.xml

to:

was_installdir\installedApps*host_name*\WC_*wc_instance_name*.ear\Stores.war\WEB-INF\cachespec.xml

Extended Sites example

This section describes the steps we took to implement caching on our test site.

Update the cachespec.xml file

1. Back up the existing cachespec.xml file located at:

   was_installdir\installedApps*node_name*\WC_*wc_instance_name*.ear\Stores.war\WEB-INF\cachespec.xml

   For example:

   ```
   C:\WebSphere\AppServer\installApps\cmw2kprol\WC_demo.ear\Stores.war\WEB-INF\cachespec.xml
   ```

2. Copy the cachespec.xml file, located in the additional materials, over the existing file that was backed up in the previous step. For more information about the additional materials provided with this book, see Appendix D, "Additional material" on page 489.
3. Open the file in a text editor.
4. Insert the contents of the following file into the edited file.

   wc_installdir\samples\dynacache\invalidation\store\hosting\cachespec.xml

   These are invalidation entries. They go at the bottom of the file, just above the line containing </cache>.
5. Save and close the file.
6. Stop and start the commerce server as described in "Starting and stopping servers" on page 476.

Starting the cache monitor

1. Start the WebSphere Application Server Administrative Console and log on.
2. Expand ***node_name*** → **Applications** in the left navigation menu.
3. Click **Install New Application**.
4. Click **Browse** to select the path to CacheMonitor.ear (in our case, C:\WebSphere\AppServer\installableApps\CacheMonitor.ear).
5. Click **Next** on the Preparing for the application installation page.
6. Click **Next** on the Provide options to perform the installation page.
7. On the Map virtual hosts for Web modules page, select the **Dynamic Cache Monitor** check box, choose the virtual host that you want the Cache Monitor to run on, **VH_demo_Admin**, and click **Next.**
8. On the Map modules to application servers page, select the **Dynamic Cache Monitor check box** and choose which Application Server you want the monitor to run on (in our case, WC_demo). Click **Apply**.

9. Click **Next** to go to the Summary page.
10. On the Summary page, take the default settings and click **Finish**.
11. When the application has been installed successfully, click **Save** on the top menu.
12. Click **Save** on the confirmation page.
13. Click **Environment → Update WebSphere Plugin**.
14. Click **OK** to regenerate the plug-in config file.
15. Close the Administrative Console.
16. Stop and start the Web server and Web administration server.
17. Stop and start the commerce server as described in "Starting and stopping servers" on page 476.
18. Open a browser window and enter the following URL:

    `https://`*`host_name`*`:8002/cachemonitor`

    This opens the page shown in Figure 9-27.

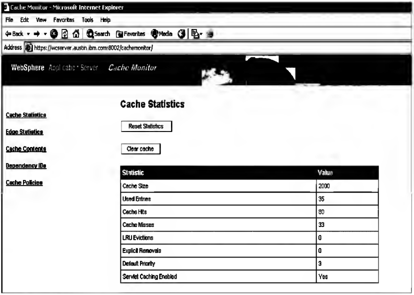


Figure 9-27 Cache monitor

The initial display shows the current cache statistics. Use the links on the left of the page to display other information concerning the cache.

9.4.5 Database cleanup

The Database Cleanup utility enables you to delete many objects from the database at the same time while maintaining referential integrity. You may want to do this if you have changed a great deal of information in your database and have unused tables or rows. There are several objects that you can delete from the database.

When the Database Cleanup utility deletes an object, the records in the object's tables are deleted to preserve the referential integrity of the database. The Database Cleanup utility command cleans the database in one of two ways: top-down or bottom-up. Top-down deletes all rows from the child tables with a delete cascade. If a delete restrict is specified in the referential integrity, the delete cascade will fail and you will have to use the bottom-up method. To use the bottom-up method, specify yes for the (Windows, AIX®, Solaris™, or 400) FORCE parameter in the command syntax, which first deletes the child tables, followed by the parent table.

Another way to trigger the bottom-up method is to specify the (Windows, AIX, Solaris, or 400) LOGLEVEL parameter as 2 in the command syntax. Specifying 0 logs nothing, and 1 logs only the delete statements from the top table. The (Windows, AIX, Solaris, or 400) LOGLEVEL 2 logs the delete statements from each deleted child table until the top table. Although selecting 2 triggers the bottom-up method, it cannot guarantee a successful deletion if there is a delete restrict in the referential integrity. To delete records with a delete restrict, specify the (Windows, AIX, Solaris, or 400) FORCE parameter as yes.

You can expect longer response time with the bottom-up method if the table has many child tables. For example, the MEMBER table contains more than 500 child tables. For performance reasons, we recommend using the top-down method.

Note: Only use Loglevel 2 or the FORCE parameter as yes if specifying the FORCE parameter as no and Loglevel 0 or 1 fails.

The Database Cleanup utility is configurable, extensible, and adaptable. Aside from the preset cleanup configurations, you can add new objects to the database table to define which tables and rows to clean.

If you have extended your database schema by creating new tables, you can use the Database Cleanup utility to clean your new tables. If you have changed your database schema (such as adding new columns to one table, changing the foreign key primary key relationship, or adding a new child table to the referential integrity path), the Database Cleanup utility will automatically adapt to the changes. If you change the column names, update the configuration data in the CLEANCONF table.

The Database Cleanup utility deletes records in child tables based on the delete rule of the referential integrity definition in the database schema. You can set the delete rule to `on delete cascade`, `on delete set null`, or `delete restrict`. If you add new tables, ensure that the referential integrity and delete rule is properly defined. Otherwise, the Database Cleanup utility cannot work with your new tables.

Note: You should only run the Database Cleanup utility on a staging server to clean the staglog object. The staging database is different from the production database. The staging database only has configuration data without the operation data. Deleting configuration data might cause a delete cascade on the operation data. When the Stage Propagate utility propagates the deletion to the production database, this might cause a cascade delete to the operation data (which you want to keep). To clean configuration data, run the Database Cleanup utility on the production database.

9.4.6 Logging and tracing

This section provides an overview of the logging and tracing facilities provided with WebSphere Commerce V5.6.1 Business Edition.

Overview

The purpose of logging messages in the WebSphere Commerce server is to notify the administrator if unexpected errors or abnormal conditions occur in the WebSphere Commerce application. Message logs and traces are important diagnostic tools that aid the Site Administrator in determining the source of problems. Tracing is a problem-determination mechanism. Tracing assists developers in debugging the code during the development stage and assists the technical support team in solving customer problems.

WebSphere Commerce provides multiple facilities for logging. For existing customers, ECTrace and ECMessage are still supported. You can no longer modify parameters for ECTrace and ECMessage from the Configuration Manager. This must be done manually in the *wc_instance_name*.xml file. For new implementations, it is recommend that JRAS, which is provided by WebSphere Application Server, be used. The Log Analyzer is a graphical utility that facilitates viewing and analyzing log files. For more information about the Log Analyzer, consult the WebSphere Application Server Information Center at:

`http://publib.boulder.ibm.com/infocenter/wasinfo/v5r1/index.jsp`

The default location for the log files is:

WAS_installdir/logs/*WC_wc_instance_name*/

The default output files are:

native_stderr.log	Process log that contains text written to the stderr stream
native_stdout.log	Process log that contains text written to the stdout stream
startServer.log	The log when starting the server
stopServer.log	The log when stopping the server
SystemErr.log	Logs any system error while the server is running
SystemOut.log	Logs the system output file while the server is running
activity.log	(in the *WAS_installdir*/logs directory) Logs continuous activity

JRas

JRas consists of multiple Java packages that provide message logging and diagnostic trace primitives. These primitives are not tied to any particular product or platform. JRas is basically composed of several components:

Loggers	A logger is the primary object with which the user code interacts. There are two types of loggers: message loggers and trace loggers. Message loggers create only message records, and trace loggers create trace records. A logger contains one or more Handlers to which it forwards events for further processing.
Handlers	A handler receives events from a logger and provides an abstraction over an output device or event consumer. An example is a file handler, which knows how to write an event to a file.
Formatters	Handlers are configured with Formatters, which know how to format events of certain types.
Event Types	Messages and traces have their own predefined event types.
Event Classes	The standalone JRas logging toolkit defines both message and trace event classes.

Note: For more information about the JRas logging toolkit, see the WebSphere Application Server JRas documentation in the WebSphere Application Server Information Center.

WebSphere JRas extensions

WebSphere provides a set of extension classes for integrating into the WebSphere Application Server runtime or for use in a J2EE environment. Logging from WebSphere Commerce makes use of the WebSphere Application Server logging facility, and these extension classes provide a better correlation of messages and traces generated from different WebSphere products. This collection of extension classes is referred to as WebSphere JRas extensions.

WebSphere JRas extensions provide appropriate logger implementation classes. Instances of these message and trace logger classes are obtained directly and exclusively from the WebSphere Manager class, which is located in the com.ibm.websphere.ras package. Other components, such as Payments and the JCA messaging framework, also make use of WebSphere JRas extensions. For a list of the WebSphere JRas extensions associated with WebSphere Commerce and Payments tracing components, see "Enabling tracing components" in the *IBM WebSphere Commerce Administration Guide*.

Note: WebSphere Commerce provides a wrapper for ECMessage and ECTrace that calls the WebSphere JRas extension APIs. However, it is recommended that Site Administrators call the JRas APIs directly.

WebSphere Commerce Payments Problem determination

As you start to use WebSphere Commerce Payments, you may need to diagnose problems that you encounter while actually using the application. The WebSphere Log Analyzer provides an interface with which you can analyze the error and trace logs to determine a course of action. All Payments error and trace logs are available through the Log Analyzer except for these messages:

- Third-party cassettes
- Standalone Payments UI
- SampleCheckout
- Cashier

ECMessage

Diagnostic logs are used for problem determination. ECMessageLog logs diagnostic messages, and ECMessages are localized. ECMessages are split into the following categories:

- System messages
- User messages

System and user messages

System messages appear in the logs and are for the benefit of debugging problems. System messages provide diagnostic information for Site Administrators. These messages may follow a system malfunction or indicate some other significant event.

System messages are assigned a product-specific message ID, `CMNnnnn's` where `nnnn's` is the key number used to identify the severity of the message.

User messages are frequently shown on the browser, and are for the benefit of a customer visiting the site. User messages give details about a problem; for example, they indicate that a specified parameter is invalid, which indicates to the

customer what value to fix when they resubmit the request. Site Administrators can use the message ID to look up more details associated with that message, and customers can report the message to support personnel for troubleshooting.

Logging levels

There are five logging levels, or severities, in the WebSphere Commerce logging system. The system message severities are:

Error Logged at all times by default. Error messages expose an error condition that can lead to system malfunction. An error message can be sent as an e-mail, á WebSphere MQ message, or by another form of notification to a Site Administrator registered with messaging.

Status Indicates certain states reached by WebSphere Commerce. For example, each component should persist a message when loaded or when the message has moved to a specific state. Status messages assist technical support in understanding the state of the components and application.

Warning Reveals a potential problem.

Information Follows events that occur in the WebSphere Commerce system and are related to events that trigger changes in the system state. For example, an information message is persisted when an order has been submitted.

Debug Overlaps with the trace component. However, debug messages enable Site Administrators to investigate a problem themselves, without involving technical support.

Because WebSphere Commerce uses the WebSphere Application Server logging facility, and the WebSphere Application Server has only three types of logging levels, the WebSphere Commerce logging levels are mapped to the WebSphere Application Server as shown in Table 9-1.

Table 9-1 WebSphere Commerce logging levels mapped to WAS levels

Logging levels in WebSphere Commerce	Logging levels in WebSphere Application Server
ERROR/ERR	TYPE_ERROR/TYPE_ERR
INFORMATION/INFO	TYPE_INFORMATION/TYPE_INFO
DEBUG	TYPE_INFORMATION/TYPE_INFO
WARNING/WARN	TYPE_WARNING/TYPE_WARN
STATUS	TYPE_INFORMATION/TYPE_INFO

The WebSphere Application GUI is used to control the enablement of the logging level or severity type. Site Administrators can specify which logging severities to record in the WebSphere Application Server Administration Console. For more information about enabling logging levels, see the information in the WebSphere Application Server InfoCenter.

ECTrace

Tracing is used for problem determination. Tracing assists developers in debugging code during the development stage and assists the technical support team in solving customer problems.

Tracing data is persisted for future reference in a trace file. A data structure consists of context information, such as a class name, a method name, and a text message. Multiple data structures describe the data flow within a software application. By analyzing the data structure sequence, a developer can understand the path that was executed, which can help determine the cause of malfunctions.

Configuring logging

All logging and tracing configuration is now done in the WebSphere Application Server Administrator's Console. The following sections cover stand-alone tools only:

- Modifying ECMessage startup options
- Modifying ECTrace startup options

Modifying ECMessage startup options

This functionality is retained from previous versions of WebSphere Commerce. ECMessage configuration is performed by editing the *wc_instance_name*.xml configuration file. After changes are made, you must stop and start the servers as defined in "Starting and stopping servers" on page 476.

ECMessage writes all output to the following file:

```
WC_installdir\instances\wc_instance_name\logs\ecmsg.log
```

This is a sample of the messageLog element in the *wc_instance_name*.xml file used to configure ECMessage logging:

```
<messageLog
fileSize="40"
messageFile="e:\wcs_wsad\instances\demo\logs\ecmsg.log"
notification="false"
notificationClassName="com.ibm.commerce.messaging.ras.ErrorNotificationHand
ler">
<logSeverity type="ERROR"/>
<logSeverity type="WARNING"/>
```

```
<logSeverity type="STATUS"/>
<logSeverity type="DEBUG"/>
<logSeverity type="INFO"/>
</messageLog>
</LogSystem>
```

If the notification attribute is set to false, all of the message severities except for ERROR are disabled. To disable a severity, remove the line from the list of severities. If the notification attribute is set to false, no error notification will be sent. If error notification is required, the notification attribute must be set to true. The messaging component must be configured properly before the error notification can function.

The fileSize attribute specifies the maximum file size in megabytes for the log file. If the actual file size exceeds the specified amount, a new file opens. The file names are re-created based on the following naming convention:

```
fileName_node_name_timeStamp.ext
```

For example, the ecmsg.log file produces system files with names such as ecmsg_m23vnx78_2000.08.08_18.17.47.768.log, with m23vnx78 being the *node_name* and the embedded time stamp being a variable factor.

Message and trace data can be captured into the same file. To configure this, their fileSize attributes must have the same value, and the XML configuration files must point to the same file location.

Modifying ECTrace startup options

The Site Administrator can configure ECTrace startup options in a stand-alone tool by editing the XML file directly:

```
WC_installdir\instances\wc_instance_name\xml\wc_instance_name.xml
```

The output of the trace is written to the following file:

```
WC_installdir\instances\wc_instance_name\logs\ecmsg.log
```

This is a sample of the trace element in the instance_name.xml file used to configure ECTrace tracing:

```
<trace>
fileSize="40"
traceFile="e:/wcs_wsad\instances\demo\logs\ecmsg.log"
<component name="ACCESSCONTROL"/>
<component name="APPROVAL"/>
<component name="BI"/>
<component name="CATALOG"/>
<component name="COLLABORATION"/>
<component name="COMMAND"/>
```

```
<component name="CONTRACT"/>
<component name="CURRENCY"/>
<component name="DATASOURCE"/>
<component name="DB"/>
<component name="DEVTOOLS"/>
<component name="EVENT"/>
<component name="EXCHANGE"/>
<component name="EJB"/>
<component name="INVENTORY"/>
<component name="MARKETING"/>
<component name="MERCHANDISING"/>
<component name="MESSAGING"/>
<component name="METAPHOR"/>
<component name="NEGOTIATION"/>
<component name="ORDER"/>
<component name="PERFMONITOR"/>
<component name="PVC"/>
<component name="RAS"/>
<component name="REPORTING"/>
<component name="RFQ"/>
<component name="SCHEDULER"/>
<component name="SERVER"/>
</trace>
```

Manage the hub

This chapter describes the available functions at the hub level. Functions detailed in this chapter affect multiple stores within the Extended Sites Hub. All of the functions included in this chapter are accessed through the WebSphere Commerce Accelerator interface.

This chapter contains the following sections:

- Overview
- Extended Sites Hub
- Extended Sites Catalog Asset Store
- B2B Direct Storefront Asset Store
- Consumer Direct Storefront Asset Store

10.1 Overview

The WebSphere Commerce Accelerator enables you to maintain online stores, hubs, and catalogs by completing store operations such as managing the look and feel of your store, creating and maintaining orders, and tracking store activities.

If you are authorized to work with multiple stores, when you log on to the WebSphere Commerce Accelerator, you select the store and language with which you want to work. If you are authorized to work with a single store, the store name is preselected during logon. Additionally, if the store supports more than one language, you can select the language with which you want to work. Finally, if you are assigned a role with fulfillment duties, you can also choose the fulfillment center associated with the store when you log on. If you wish to change your store, language, or fulfillment center selection, click the Select icon in the upper left corner to display the selection dialog.

Tasks that you are authorized to perform in your role are displayed on the WebSphere Commerce Accelerator home page menus. These tasks are based on user roles, authority levels, and the business model and type of store. If you need to change your access level, contact your Site Administrator. To return to the WebSphere Commerce Accelerator home page at any time, click Home near the top of the WebSphere Commerce Accelerator.

> **Note:** Ensure that you log off the WebSphere Commerce Accelerator before you log on to another Administration tool (such as the Administration Console or the Organization Administration Console). If you access another tool without first logging off of the WebSphere Commerce Accelerator, any unsaved work will be lost and an error message will be displayed.

To open the WebSphere Commerce Accelerator:

1. Access the following Web address in your browser:

   `https://host_name:8000/accelerator`

   host_name is the fully-qualified WebSphere Commerce Web server host name. The host name may be a virtual host name on the Web server.

2. From the WebSphere Commerce Logon page, type your WebSphere Commerce user name and password. The Select Store and Language page displays.

Note: If only one store, one language, and one or no fulfillment center is defined, then the Select Store and Language page does not display. You go directly from the WebSphere Commerce Accelerator logon page to the home page.

3. Specify the name of the store you want to work with. If you are authorized to work with a single store, the store name is preselected. Otherwise, your options are:
   a. From the Store name pull-down list, select the name of the store.
   b. If there are numerous stores to list, the system may prompt you to use the options under Find a store to search for a store. Under Find a store, type all or part of the store name into the Store name field, and from the pull-down list beside this field select how you want the system to perform your search. Click **Find**.
   c. To list all stores you are authorized to work with, select **List All**.
4. If you are assigned a role with fulfillment duties, select the name of the fulfillment center associated with the store from the Fulfillment center pull-down list.
5. From the Language to work in pull-down list, select the language in which you want to administer the store. If you are authorized to work with a single language, the language is preselected. If you are authorized to work with more than one of the WebSphere Commerce supported languages, the store's default language is preselected; however, you can select a different language from this list.
6. Click **OK**. The WebSphere Commerce Accelerator home page displays. Select the menu and menu option you want to work with. If you do not see the menu or menu option, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.

10.2 Extended Sites Hub

To manage Extended Sites stores within the hub, access the WebSphere Commerce Accelerator and select **Extended Sites Hub** in the Store name list. Click **OK**, and the following menus appear, varying depending on the role assigned to the current user:

- Hub
  - Open/Close
  - Change Profile

- Extended Sites
  - View Stores
  - New Store
  - Import Store
  - Find Stores
  - Broadcast E-mail
  - Report Delivery Settings
- Reports
  - Store Level Reports
  - Site Level Reports

The role of Channel Manager has access to one or more options on the WebSphere Commerce Accelerator menu when the Extended Sites Hub is selected:

- Channel Manager
  - Hub
    - Open/Close
    - Change Profile
  - Extended Sites
    - View Stores
    - New Store
    - Import Store
    - Find Stores
    - Broadcast E-mail
    - Report Delivery Settings
  - Reports
    - Store Level Reports
    - Site Level Reports

Note: When the ExtendedSites.sar file is published, a user is created (extendedsitesadmin). This user is a member of the Extended Sites Hub Organization and has the following roles:

- Registered Customer
- Channel Manager
- Category Manager
- Operations Manager
- Marketing Manager
- Seller

10.2.1 Hub: Open/Close

This option is used to open or close the Extended Sites Hub. If the hub is closed, follow these steps to open the hub for business:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list box.
3. Select **Hub** → **Open/Close**.
4. Click **Open Store**. This displays a dialog box.
5. Click **OK**. A process window is displayed, followed by another dialog box.
6. Click **OK**.

If the hub is open, follow these steps to close the hub:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list box.
3. Select **Hub** → **Open/Close**.
4. Click **Close Store**. This displays a dialog box.
5. Click **OK**. A process window is displayed, followed by another dialog box.
6. Click **OK**.

10.2.2 Hub: Change Profile

This option is used to change information in the hub profile. The profile information is organized in a notebook format with a set of tabs. Figure 10-1 depicts the General tab of the Change Profile notebook.

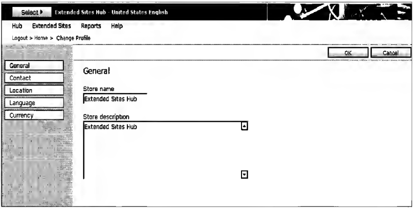


Figure 10-1 Hub Change Profile

The information that can be changed through this notebook includes:

- General tab
  - Store name
  - Store description
- Contact tab
  - Address
  - Phone number
  - E-mail address
- Location tab
  - Address
- Language tab
  - Selected languages for the store from a list of available languages
- Currency tab
  - Selected currencies for the store from a list of available currencies

To update profile information for the hub:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list.
3. Select **Hub** → **Change Profile**.
4. Locate fields to be changed by clicking the appropriate link on the left of the window.
5. Make the needed changes and click **OK**.

10.2.3 Extended Sites: View Stores

Use this list to view the service agreements defining stores. From this list, you can import new service agreements, view the details of the service agreements, control the service agreements, and control the stores. The sellers and their service agreements are displayed in a table with the following information:

- Store Name: The name of the store.
- Service Agreement Name: The unique name of the service agreement that defines the store.
- Store Status: The current status of the service agreement or store. A service agreement or store can have the following states:
  - Open: A store exists for the seller and is open to customers.
  - Closed: A store exists for the seller and is not open to customers.
  - Suspended: A store exists but the service agreement for the store is suspended. Customers cannot access the store and the seller cannot open the store.

- Deploying: The service agreement is being deployed. The store is created as part of this deployment process.
- Deployment Failed: Deployment of the service agreement has failed. No store has been created.

- Created: The date and time when the store was created.

A list of buttons for controlling the stores within the hub is available on the right side of the page:

- New
- Import
- Suspend
- Resume
- Open
- Close
- Deploy
- Filter Catalog
- Summary
- Export
- Find
- Refresh
- Reports
- Change Store Category
- Delete

The following sections describe the functions of the buttons.

New

Clicking **New** displays the first page of the Store Creation Wizard, with which you build a new customer-facing store based on a previously published storefront asset store. (See 10.2.4, "Extended Sites: New Store" on page 273.)

Import

Imports a service agreement XML file to build a store (without the Store Creation Wizard). The service agreement XML file must be accessible from your local machine. For a sample service agreement, see Appendix D, "Additional material" on page 489.

Suspend

Suspending an Extended Site prevents customers from accessing the store and prevents the seller from opening it. Only Extended Sites with a status of Open or Closed can have their service agreements suspended.

To suspend an Extended Site store:

1. Open the WebSphere Commerce Accelerator.
2. Select **Extended Sites** → **View Stores**. The Extended Sites store list is displayed.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Check the box next to the Open or Closed store that you want to suspend.
4. Click **Suspend**. The hosted store is given a Suspended status.

Resume

A suspended store can be resumed, enabling the seller to access it. Customers are prevented from accessing the store until the store is opened.

To resume an Extended Site store:

1. Open the WebSphere Commerce Accelerator.
2. Select **Extended Sites** → **View Stores**. The Extended Sites store list is displayed.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the store that you want to resume. Only stores with a status of Suspended can be resumed.
4. Click **Resume**. The hosted store is given a Closed status.

Open

Before customers can access a store, the store must be opened. Only stores with a status of Closed can be opened.

If a store is suspended, the Channel Manager must be contacted to open the store again.

To open an Extended Site store:

1. Open the WebSphere Commerce Accelerator.
2. Select **Extended Sites** → **View Stores**. The Extended Sites store list is displayed.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the store that you want to open. Only stores with a status of Closed can be opened.

4. Click **Open**. The hosted store is given Open status.

Note: A store administrator or seller can also open a closed store. See 11.2.1, "Store: Open/Close" on page 331.

Close

Closing a store prevents customers from accessing a store. Stores should be closed before making any changes to them. Closing a store does not prevent the seller from canceling or fulfilling orders for the store, but the seller cannot change or create orders.

To close an Extended Site store:

1. Open the WebSphere Commerce Accelerator.
2. Select **Extended Sites** → **View Stores**. The Extended Sites store list is displayed.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the store that you want to close. Only stores with a status of Open can be closed.
4. Click **Close**. The hosted store is given a Closed status.

Note: A store administrator or seller can also close an open store. See 11.2.1, "Store: Open/Close" on page 331.

Deploy

Deploys a service agreement manually if the service agreement is listed in the Deployment Failed state. Deployment of a service agreement normally occurs automatically after the service agreement is imported.

Filter Catalog

Accesses the Catalog Filter (Figure 10-2 on page 270) to exclude categories and products from being sold in a store. This option enables you to select which portions of the shared catalog are visible to customers of a particular store.

To modify which portions of the shared catalog can be viewed by customers of an Extended Sites store:

1. From the View Stores page, select a store by checking the box next to the store name.
2. Click **Filter Catalog**. The Catalog Filter page is displayed (Figure 10-2).

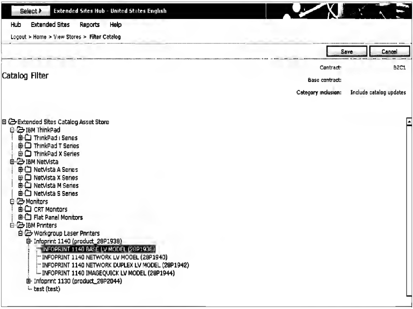


Figure 10-2 Catalog Filter page

3. Expand a category either by double-clicking it or right-clicking it and selecting **Expand**.
4. To exclude a category or a product from the selected store, select the category or product in the tree and click **Exclude** in the pop-up menu.
5. To include a category or product that has previously been excluded, select the category or product and click **Cancel Settings** in the pop-up menu.

   Note: Excluded categories and products are marked with a red X.

6. Click **Save** when complete.
7. Click **Refresh** to see the results of the catalog filter process.

Summary

Presents a summary of a service agreement. Figure 10-3 shows the Store Service Agreement Summary.

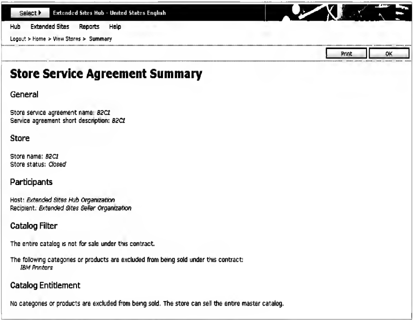


Figure 10-3 Store Service Agreement Summary

Export

Exports a service agreement in XML format from WebSphere Commerce Server. The default directory for the exported files is:

WC_installdir\xml\trading\xml

This option creates an XML file that contains all of the information that was required to create the Extended Site. The file can be customized and used to create new stores.

To export a store service agreement:

1. From the View Stores page, select a store by checking the box next to its name.
2. Click **Export**.

3. Enter a name for the exported file. The content of the file will be in XML, so give the file an .XML extension. (This is not done automatically.)

   Note: The file will be placed in the <*wc_installdir*>`\xml\trading\xml` directory.

4. Click **OK**.
5. Click **OK**.

The file is created and you are returned to the stores list page. A sample of an exported service agreement is provided with the additional materials of this book. See Appendix D, "Additional material" on page 489 for more details.

Find

Use this to search for a service agreement matching your search criteria.

Refresh

The **Refresh** button updates the list of sellers and the status of the service agreements.

Reports

Opens the reports page for the store. Several store-level reports are available:

- Storefront Usage Report

  This report shows key data (orders, order status, customers, visits) for a snapshot of the selected store's operations and performance.

- Order Status Report

  Shows details of orders for the selected store, either for a particular order state or all valid order states. In the resulting report, clicking the Order ID displays details of the order items associated with the order.

- Order Item Status Report

  This report enables you to view details of order items for the selected store by selecting either a particular order state or all valid order states.

To produce one of the reports:

1. From the View Stores page, select a store by clicking the check box next to the store name.
2. Click **Reports**. This displays a report selection page.
3. Select one of the reports by clicking on the name.

4. Enter the reporting criteria and click **OK**. The report is display.
5. Click **Print** to print a hard copy of the report.
6. Click **OK** to return to the report selection page.

Change Store Category

This function is not relevant to Extended Sites.

Delete

To delete an Extended Sites store:

1. From the View Stores page, select a store by checking the box next to the store name.
2. Click **Delete**.
3. Click **OK** to confirm. The View Stores page is displayed with the deleted store removed from the list.

10.2.4 Extended Sites: New Store

This is the Store Creation Wizard. To create a new store within the hub, follow these steps:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list.
3. Select **Extended Sites → New Store**. The General page is displayed.
4. Complete the entries in the General page:
   a. Enter the Store unique identifier (required).
   b. Enter a Store display name. This is the name that the customers will see (required).
   c. Enter a description of the store (required).
   d. Enter a valid e-mail address for the recipient of store notifications (required).
   e. Select the default store currency (required).
   f. Select the Store organization (required). An organizational unit under the Store organization will be created for the store.
   g. If you would like to allow registered customers of other stores within the site to access this store, select its check box.
5. Click **Next**. The Store Type page is displayed.

6. Select the storefront asset store on which this functional store will be based from the Store type list box. The available store types are:
   - B2BDirectStorefrontAssetStore
   - ConsumerDirectStorefrontAssetStore
7. Click **Next**. The Catalog page is displayed.
8. Select the catalog for the store from the Catalog list box. You can choose to start with an Empty catalog or use the shared catalog from the Extended Sites Catalog asset store.
9. Click **Next**. The Payments page is displayed.
10. Complete the entries in the Payments page.
    a. Select the check box next to each of the payment options that you would like to provide for customers of this store
       - Cash On Delivery (COD)
       - Pay by phone (BillMe)
       - Credit card (processed offline)

       If Credit card is checked, the Brand and Currency list boxes are displayed as depicted in Figure 10-4.

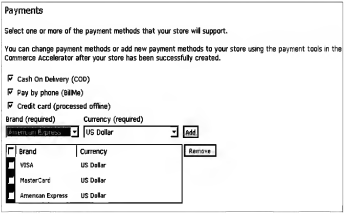


Figure 10-4 Payments page

    b. Select a combination of Brand and Currency and click Add. Repeat this for each combination that will be available for the store.

Note: Additional credit card brands may be added through the Payment Manager interface.

11. Click **Next**. The Summary page is displayed.
12. Review the contents of the Summary page. You can click **Previous** to return to any page within the Store Creation Wizard to change values.
13. Click **Finish** when you are ready to create the store. The Store Creation Confirmation page opens, displaying a progress bar while the store is being created.

10.2.5 Extended Sites: Import Store

To create a new store, import the service agreement in XML format from your local client to the server. The import process consists of two steps: uploading the service agreement and deploying the store.

Upon successful import, a store is created that respects the terms and conditions defined in the service agreement.

To import a service agreement and create a new store:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list box.
3. Select **Extended Sites** → **Import Store**. The Import Store page is displayed.
4. Enter the fully qualified name of the XML file containing the service agreement to be imported or click **Browse** to locate it.
5. Click **Import**.

10.2.6 Extended Sites: Find Stores

To find an Extended Sites store:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list box.
3. Select **Extended Sites** → **Find Stores**. The Find Stores page is displayed.
4. Enter your search criteria:
   a. Enter all or part of the store name and select either **Matches containing** or **Exact match** from the associated list box.
   b. Enter all or part of the service agreement name and select either **Matches containing** or **Exact match** from the associated list box.
   c. Select a store status to search on from the Store Status list box.
      - All
      - Open

- Closed
- Deploying
- Deployment Failed
- Suspended

5. Click **Find**. The View Stores page is displayed containing the search results.

10.2.7 Extended Sites: Broadcast E-mail

This option is used to send a broadcast e-mail to addresses defined as recipients for Extended Sites.

> **Note:** Ensure that the site administrator has properly configured e-mail settings before using this feature. See 9.2.7, "Configuration: Transports" on page 212.

To send a broadcast e-mail:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list box.
3. Select **Extended Sites** → **Broadcast E-mail**. The Broadcast E-mail page is displayed.
4. Enter a valid e-mail address in the Sender field.
5. Check the appropriate boxes under Recipients:
   - Open Stores
   - Closed Stores
   - Suspended Stores

   > **Note:** A valid e-mail address must be defined in the E-mail address field on the contact page of the store profile in order for this mail to be sent. See 11.2.2, "Store: Change Profile" on page 331 for details.

6. Optionally enter additional recipient e-mail addresses separated by commas.
7. Enter a Subject.
8. Enter the Message Content.
9. Click **Send**. The message is queued for sending. The next time that the scheduler process sends e-mail, this message will be sent. It is not sent immediately.

10.2.8 Extended Sites: Report Delivery Settings

Use this page to select the frequency and format for receiving the site or store commerce report.

Note: These configurations are being made to the message for the store commerce report if you are managing a store, or to the message for the site commerce report if you are managing the Hub.

- Frequency

  Determine whether you want to receive reports on a monthly or quarterly basis. Monthly reports are sent out at the end of the month. Quarterly reports are sent out by the fiscal quarter, beginning on the dates you select.

- Format

  Determine whether you want to receive reports in formatted text or separated by commas. Comma-separated data can be easily extracted and imported to many spreadsheet and database programs for further analysis.

10.2.9 Reports: Store Level Reports

The following store level reports are available:

- Storefront Usage Report

  This report shows key data (orders, order status, customers, visits) to provide a snapshot of the selected store's operations and performance.

- Order Status Report

  This report enables you to view details of orders for the selected store by selecting either a particular order state or all valid order states. In the resulting report, clicking on the Order ID displays details of the order items associated with the order.

- Order Item Status Report

  This report enables you to view details of order items for the selected store by selecting either a particular order state or all valid order states.

Note: Several of the reports contain information about store and site activity, such as:

- Pages viewed
- Number of visitors
- Shopping carts created
- Products viewed

In order for this data to be populated in the reports, two event listeners must be enabled and started in the Configuration Manager. If your reports show zeroes in these or related values, follow the instructions in "Configure for reporting" on page 486.

To view store level reports:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list box.
3. Select **Reports → Store Level Reports**. The Store Level Reports - Find page is displayed.
4. Enter one or more search criteria:
   a. Enter all or part of the seller name and select either **Matches containing** or **Exact match** from the associated list box.
   b. Enter all or part of the store's short description and select either **Matches containing** or **Exact match** from the associated list box.
   c. Enter all or part of the store name and select either **Matches containing** or **Exact match** from the associated list box.
   d. Select a store status from the list box.
      - All
      - Open
      - Closed
      - Deploying
      - Deployment Failed
      - Suspended
5. Click **Find**. The search results page is displayed.
6. Select the store for reporting by checking the box to the left of the store name and clicking **Reports**. The list of available reports is displayed.
7. Select the report for viewing by clicking the report name.
8. Enter starting and ending dates for the reporting period.
9. Select the currency from the list box.

10. Click **OK**. The report is displayed. Click **Print** to print the report in hard copy.
11. Click **OK** when complete. The list of available Store Level Reports is displayed.

10.2.10 Reports: Site Level Reports

The following site level reports are available.

- Store Performance Report

  This report ranks stores in descending order by the amount of gross sales that they generate.

- Site Overview Report

  This report provides key criteria for the site such as: orders, customer visits, and total sales. It is designed to help you assess the load on the site as a whole.

- Region Report

  This report shows data about sales and shopper activity for the countries that shoppers provide when they register.

Note: Several of the reports contain information about store and site activity such as:

- Pages viewed
- Number of visitors
- Shopping carts created
- Products viewed

In order for this data to be populated in the reports, two event listeners must be enabled and started in the Configuration Manager. If your reports show zeroes in these or related values, follow the instructions in "Configure for reporting" on page 486.

To view site level reports:

1. Access the WebSphere Commerce Accelerator.
2. Select the **Extended Sites Hub** from the Store name list box.
3. Select **Reports** → **Site Level Reports** to open the Site Level Reports list.
4. Select a report for viewing by clicking the name of the report. The report content is displayed. Click **Print** to print the report in hard copy.
5. Click **OK** when complete. The Site Level Reports list is displayed.

10.3 Extended Sites Catalog Asset Store

To perform functions that affect the shared catalog, access the WebSphere Commerce Accelerator and select the Extended Sites Catalog Asset Store in the Store name list box. After clicking **OK**, the following menu is displayed depending upon the particular role assigned to the current user:

- Products
  - Catalog Management
  - Find Catalog Entries
  - Find Categories
  - Find Bundles or Kits
  - Find Merchandising Associations
  - Sales Catalogs
  - Catalog Import

> **Note:** The Catalog Import option requires administrator access.

The role of Category Manager has access to one or more options on the WebSphere Commerce Accelerator menu when the Extended Sites Catalog Asset Store is selected:

- Category Manager
  - Products
    - Catalog Management
    - Find Catalog Entries
    - Find Categories
    - Find Bundles or Kits
    - Find Merchandising Associations
    - Sales Catalogs

10.3.1 Products: Catalog Management

Use this option to maintain the shared catalog for your stores. Figure 10-5 on page 281 depicts the structure of the master catalog with the sample data loaded.

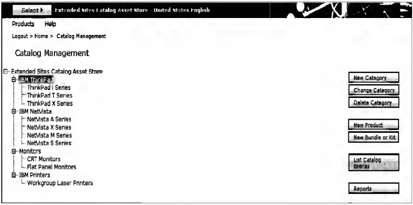


Figure 10-5 Catalog management

The following sections describe the functionality on this page.

Create a new category

To create a new category:

1. Click **New Category**. This opens the category notebook.
2. Complete the fields on the page:
   a. Enter a category code (required).
   b. Enter a category name to be displayed (required).
   c. Enter a category description.
   d. Check **Display to customers**.
   e. Check **To be used in contracts**, if you want this category to be accessible to a contract.
3. Click **Next.** The catalog tree is displayed.
4. Select a category in the tree display and click **Next**.
5. Enter a relative location for the thumbnail image (for example, \images\catalog\test_sm.gif).
6. Enter a relative location for the full-sized image (for example, \images\catalog\test.gif).
7. Click **Finish**.
8. Click **OK**. This returns you to the Catalog Management page. Expand the tree to locate your new category.

Change a category

To change a category:

1. Select a category from the catalog tree display.
2. Click **Change Category**. This displays the category notebook.
3. Change the required data. Click any of the tabs on the left side of the page to navigate to another page in the notebook.
4. Click **OK** when complete.
5. Click **OK**.

Delete a category

To delete a category:

1. Select the category to be deleted from the catalog tree display.
2. Click **Delete Category**.
3. Click **OK** to delete the category.
4. Click **OK**.

Create a new product

To add a new product to the catalog:

1. Click **New Product**. The New Product Wizard opens.

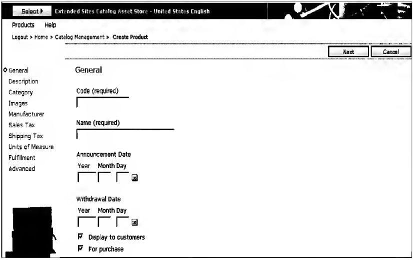


Figure 10-6 New Product wizard

2. Complete the fields on the page.
   a. Enter a Code for the product. This must be unique within the catalog.
   b. Enter a Name of the product. This must be unique within the catalog.
   c. Optionally enter an announcement date.
   d. Optionally enter a withdrawal date.
   e. If the product can be displayed to customers, check **Display to customers**.
   f. If the product is available to buy, check **For purchase**.
3. Click **Next**.
4. Enter a short description of the product and up to three long descriptions. The short description can be up to 254 characters. The first long description can be up to 1 MB in size. The other long description fields can be up to 4000 characters. The descriptions can include standard text and HTML formatting.
5. Click **Next**.
6. Select the parent category of the product from the catalog tree. This is the master catalog, so a product can appear in one and only one category.
7. Click **Next**.
8. Enter the relative path for the full-sized product image (for example, \images\catalog\test.gif).
9. Enter the relative path for the thumbnail product image (for example, \images\catalog\test_sm.gif).
10. Click **Next**.
11. Enter the manufacturer's part number and the manufacturer's name.
12. Click **Next**.
13. Enter sales tax information for the product.

    Note: Sales tax rules must already be defined for the store.

14. Click **Next**.
15. Enter shipping tax information for the product if required.
16. Click **Next**.
17. Enter units of measure for shipping if required.
18. Enter fulfillment information.
19. Click **Next**.

20.Enter an optional URL that is displayed on the product page. This can be used for detailed product information.

21.Click **Finish**. The dialog in Figure 10-7 is displayed.

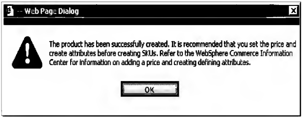


Figure 10-7 Success dialog

22.Click **OK**. To set prices and generate SKUs, see "List catalog entries (Product Management)" on page 286.

Create a new bundle or kit

To add a new bundle or kit to your catalog:

1. Click **New Bundle or Kit**. The General page displays.
2. Add the following information:
   a. Under Type, select either Bundle, Prebuilt kit, or Dynamic kit.
   b. In the Code field, type the code, which uniquely identifies the bundle, prebuilt kit, or dynamic kit in the WebSphere Commerce system.
   c. In the Name field, type the name of the bundle, prebuilt kit, or dynamic kit, such as `Baby Gift Set`.
   d. In the Announcement Date field, add the year, month, and day that the bundle, prebuilt kit, or dynamic kit becomes available to customers. This field is for your information only.
   e. In the Withdrawal Date field, add the year, month, and day that the bundle, prebuilt kit, or dynamic kit is removed from the catalog and is unavailable for customers to purchase. This field is for your information only.
   f. Select the **Display to customers** check box to ensure that your bundle, prebuilt kit, or dynamic kit is available for viewing in the catalog.
   g. Select the **For purchase** check box to specify that customers can include the bundle, prebuilt kit, or dynamic kit in their shopping carts and order it.
3. Click **Next**. The Description page displays.

4. Add the following information:
   a. In the Short description field, type a brief description of the bundle, prebuilt kit, or dynamic kit, such as `A gift set for the new baby`.
   b. In the Long description 1 scroll box, type a detailed description of the bundle, prebuilt kit, or dynamic kit, such as `A gift set for the new baby. Welcome a new addition with a striped soft knit one-piece, soft knit cap, 2 pairs of socks, 2 undershirts, a baby blanket, and plush teddy bear. Available in pink, blue, or white.`
   c. In the Long description 2 scroll box, type a second detailed description of the bundle, prebuilt kit, or dynamic kit, if applicable.
   d. In the Long description 3 scroll box, type a third detailed description of the bundle, prebuilt kit, or dynamic kit, if applicable.
5. Click **Next**. The Category page displays.
6. From the master catalog's category tree, select the appropriate parent category for the bundle, prebuilt kit, or dynamic kit.
7. Click **Next**. The SKU page displays.
8. If you know the SKU code, type it into the Code field and click **Add**. You can add more than one code by separating each one with a comma. If you do not want to add SKUs now, you can add them to an existing bundle or kit.
9. Click **Next**. The Images page displays.
10. All bundle, prebuilt kit, or dynamic kit image files should be placed in the store's defined image directory. Add the following information:
    a. In the Full size image file and location field, type the full-size image path and name for the bundle, prebuilt kit, or dynamic kit.
    b. In the Thumbnail image file and location field, type the thumbnail-size image path and name for the bundle, prebuilt kit, or dynamic kit.

    The correct image directory and whether you need an absolute or relative path depends on your store's configuration. Ask a store developer with Site Administrator authority for the correct image directory. For example, the WebSphere Commerce starter store images use a relative path to the default installation path.
11. Click **Next**. The Manufacturer page displays.
12. Add the following information:
    a. In the Part Number field, type the part number that the manufacturer or vendor uses to uniquely identify the bundle, prebuilt kit or dynamic kit.
    b. In the Manufacturer Name field, type the name of the manufacturer or vendor for the bundle, prebuilt kit or dynamic kit.

13.Click **Next**. The Sales Tax page displays.

14.Select the tax name from the Available taxes list, and click **Add**. If you need to create a new sales tax, use the WebSphere Commerce Accelerator.

15.Click **Next**. The Shipping Tax page displays.

16.Select the tax name from the Available taxes list, and click **Add**. If you need to create a new shipping tax, use the WebSphere Commerce Accelerator.

17.Click **Next**. The Units of Measure for Shipping page displays.

18.This page only applies to kits. Because a bundle is a collection of SKUs that can be separated, the individual SKU settings are used for the bundle.

   a. In the Weight field, type the kit weight.

   b. In the Weight Measure field, select a unit of measure for the weight.

   c. Fill in the Sold in multiples of this amount field.

   d. Fill in the Number of items per kit field with the number of SKUs per shipping package.

   e. In the Unit of Measure field, select the unit of measure used for the kit.

19.Click **Next**. The Advanced page displays.

20.In the URL field, type the URL where customers can download the bundle, prebuilt kit, or dynamic kit (in the case of software) or find more information. Ensure that the URL does not contain spaces.

21.Click **OK** to save the bundle, prebuilt kit or dynamic kit.

22.Click **OK**.

> **Note:** If the changes to the catalog data do not display, the Site Administrator may have to disable caching or remove the currently cached JSP pages.

List catalog entries (Product Management)

The Product Management tools in the WebSphere Commerce Accelerator enable you to manage the products in your store's master catalog using various wizards and notebooks. You can also use the Product Management dynamic table to update your catalog entry information directly.

Using the Product Management tools, you can:

- Work with one of the following types of catalog entries:
  - Products

    Products act as templates for SKUs, the individual pieces of merchandise that are ultimately sold to a customer. The product wizard enables you to

create new products for your catalog. Use the product notebook to view or change product details, such as names, descriptions, and images, or delete products from your catalog. You can update product taxes, discounts, and shipping categories, and add shipping measurements for each product. You can also customize fulfillment options for your product, such as tracking inventory or back-ordering a product for an order.

- SKUs

  After you have created your product, you must create SKUs to represent each orderable item of merchandise for sale. All SKUs related to a particular product exhibit the same set of attributes and are distinguished by their defining attribute values. You can create SKUs using the SKU wizard or automatically generate SKUs for a product after you have created all required product attributes. The SKU notebook enables you to view or change SKU details, such as names, descriptions, and images, and delete SKUs from your catalog. You can update sales tax, discounts, and shipping categories, and add shipping measurements for each SKU.

- Bundles and kits

  Bundles and kits are groupings of catalog entries. Used for promotional purposes, the catalog entries in bundles and kits are grouped in such a way to attract customers.

  A prebuilt kit is a collection of catalog entries that cannot be sold separately. For example, a computer prebuilt kit might contain a specific central processing unit, monitor, and hard drive. A prebuilt kit has its own price and can be added to the shopping cart. After it is added to the shopping cart, you cannot change the prebuilt kit contents. Viewed in similar ways as a product, a prebuilt kit can have descriptive attributes.

  A dynamic kit is a group of products that are ordered as a unit. The information about the products in a dynamic kit is controlled by an external configurator and supplied at order entry time. The definition of the components that make up the kit is not known until the kit is configured, hence the name dynamic kit. The individual components of a dynamic kit cannot be modified in the order, but they can be reconfigured by the configurator. The entire configuration must be fulfilled together.

  A static kit is also a group of products that are ordered as a unit. The information about the products in a static kit is predefined and controlled within WebSphere Commerce. The individual components of the order cannot be modified and must be fulfilled together. A static kit will backorder if any of its components is unavailable. A static kit cannot be viewed in the Product Management dynamic tools, but it can be viewed as a prebuilt kit.

  Unlike kits, a bundle is a collection of catalog entries that enable a customer to buy multiple merchandise with one click. For example, when a

bundle for a computer is a central processing unit, a monitor, a hard drive, and a CD-ROM drive, the components can be sold separately. A bundle's price is composed by its different catalog entries. A bundle cannot be purchased directly.

- Categories

  A category, also known as a catalog group, is used to group products and services offered by the store. You can create, find, list, change, and delete categories. You can classify products and SKUs under different parent categories.

- Attributes

  There are two types of attributes:

  Defining attributes are properties of SKUs in an online store, such as color or size. Attribute values are the property of an attribute such as a specific color (blue or yellow) or size (medium). You must predefine attribute values before assigning them to SKUs. Attribute values are implicitly related to their attributes. Each possible combination of attributes and attribute values equals a new SKU. After creating attributes and their values, you can update information such as name, description, and type (text, whole numbers, or decimal numbers). Defining attributes are also used for SKU resolution.

  Descriptive attributes are simply additional descriptions. For example, a descriptive attribute can specify dry clean only clothing or whether electronics equipment uses AA or AAA batteries. Descriptive attributes are not used for SKU resolution.

- Pricing

  A price for a product or SKU, in one or more currencies, along with a set of conditions such as setting a price for different quantities (for example, 1 to 5, 6 or more), which must be satisfied in order to use the price. You can create, list, and change pricing associated with a product or SKU.

To work with products and SKUs, select a category from the catalog tree display and click List Catalog Entries. Figure 10-8 on page 289 shows the Product Management tool.

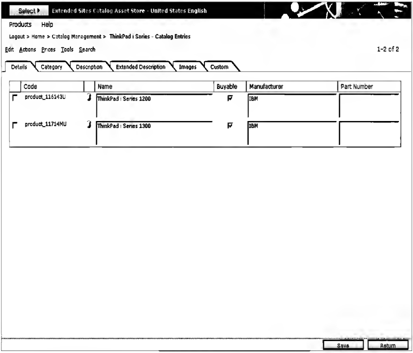


Figure 10-8 Product Management tool

This is a very complex tool, and a full description of its functionality is outside the scope of this book. For more information about the product management tool, search for "product management tools" in the WebSphere Commerce Information Center.

Product reports

The Reports feature on the Catalog Management page does not work when you are managing the Catalog Asset Store. A fulfillment center is a required selection criterion for each report, but the Catalog Asset Store does not have any fulfillment centers because it does not track inventory. To produce product reports, you must be managing a customer-facing store that has at least one fulfillment center.

For information about the available product reports, see "Product Reports" on page 353.

10.3.2 Products: Find Catalog Entries

To find a catalog entry:

1. From the Products menu, select **Find Catalog Entries** to display the Catalog Entry Search page (Figure 10-9).

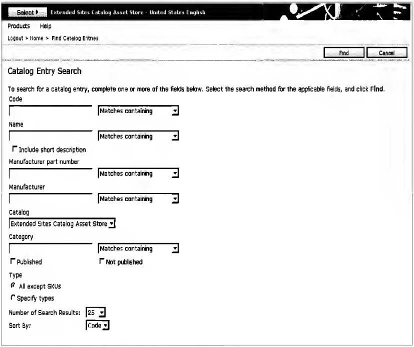


Figure 10-9 Catalog Entry Search page

2. You can search for a catalog entry by using one of more of the fields on the page. To use the Code, Name, Manufacturer part number, Manufacturer, or Category fields, follow this example for the Code field:

   a. Type the relevant search term and select the search method from the pull-down list beside this field:

      - If you know the code, select **Exact phrase** in the Code list to search for a catalog entry that is an exact match with the code provided. The system performs an exact search. If you type more than one word, such as `SKU 12345`, then the system only returns search results that match the combination and order of the given text.

- If you know only part of the code, select **Matches containing** to search for catalog entries that have codes that contain your search criteria. The system performs a fuzzy search. If you type more than one word, such as `SKU 12345`, then the system returns all matches that contain SKU, 12345, or both. Only one word is needed for a search result.

  Note: For all fields, ensure that the search criteria do not contain any of the following characters: % \ " _ #

b. Select the **Include short description** check box, and use the field to include the short description of the catalog entry in your search.

c. In the Catalog field, select the store catalog that contains your catalog entry. If you have more than one catalog for your store and you do not select a catalog, the store's master catalog is used as the default.

d. Select **Published** if your catalog entry description has been published, or **Not published** if the description has not been published. If you do not select one, the search will ignore the publish flag from the database.

e. Select the **Type** of catalog entry. The default selection is All except SKUs. To narrow your search to a specific type of catalog entry, select **Specify types** and the appropriate type.

f. Select the **Number of Search Results** to display per page: 25, 50, 100, 250, or 500.

g. In the **Sort By** field, select whether you want to display your search results by Code or by Name. Code is the default.

3. Click **Find**. This displays a list of catalog entries in the Product Management dynamic table that match the search criteria. See "List catalog entries (Product Management)" on page 286.

10.3.3 Products: Find Categories

To find a category:

1. From the Products menu, select **Find Categories** to display the Find Categories search page.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

2. Provide any of the following category information:
   a. In the Name field, type the category name and select the search method from the pull-down list beside this field, as follows:
      - If you know the category's name, select **Exact phrase** to search for a category that is an exact match with the category name provided. The system performs an exact search. If you type more than one word, such as `science fiction`, then the system only returns search results that match the combination and order of the given text.
      - If you only know part of the category's name, select **Matches containing** to search for categories that have names that contain your search criteria. The system performs a fuzzy search. If you type more than one word, such as `science fiction`, then the system returns all matches that contain science, fiction, or both. Only one word is needed for a search result.

      Note: For all fields, ensure that the search criteria do not contain any of the following characters: % \ "_ #

   b. Use the **Description** field in the same way as the Name field.
3. Click **Find**. This displays a list of categories that match the search criteria on the Catalog Management page, see 10.3.1, "Products: Catalog Management" on page 280.

10.3.4 Products: Find Bundles or Kits

To find a bundle, prebuilt kit, or dynamic kit:

1. From the Products menu, select **Find Bundles or Kits** to display the Bundle and Kit Search page.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Follow step 2 on page 290 in for information about how to use any of the criteria fields in your search.
3. Click **Find**. This displays a list of catalog entries in the Bundles and Kits page (Figure 10-10 on page 293) that match the search criteria.

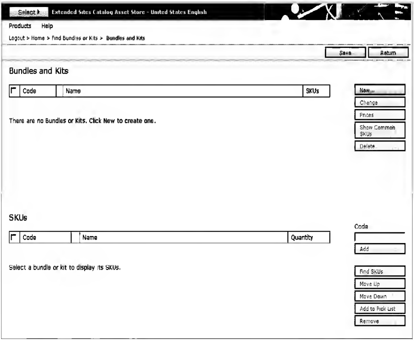


Figure 10-10 Bundles and Kits page

10.3.5 Products: Find Merchandising Associations

To find a catalog entry belonging to a merchandising association:

1. From the Products menu, select **Find Merchandising Associations** to display the Catalog Entry Search page.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

2. Follow step 2 on page 290 for information about how to use any of the criteria fields in your search.
3. Click **Find**. This displays a list of catalog entries in the Merchandising Associations page (Figure 10-11 on page 294) that match the search criteria.

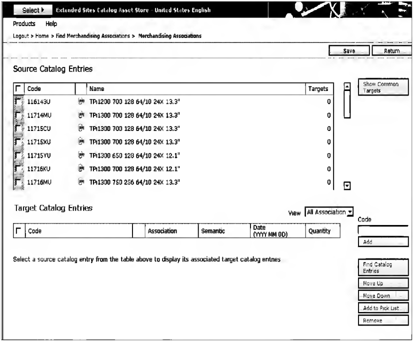


Figure 10-11 Merchandising Associations

10.3.6 Products: Sales Catalogs

This option is not available for the Extended Sites business model out-of-the-box. We had to enable this capability with some manual edits. For more information about enabling sales catalogs for Extended Sites, see 5.3.1, "Sales catalog" on page 95.

A WebSphere Commerce system has two types of catalogs: master and sales. A master catalog is the central location to manage all of your store's merchandise and services. A sales catalog is a subset of the merchandise and services found in the master catalog.

Every store in the WebSphere Commerce system must have a master catalog. Only one master catalog can exist at a time, and multiple stores can share a master catalog. However, you can create one or more sales catalogs for customer display purposes. A sales catalog has a flexible display structure that enables you to associate products to more than one category to suit the requirements of your store.

In sales catalogs, you can maintain an unlimited number of catalog hierarchies and place products in any number of locations within a single sales catalog structure. Sales catalogs can be used to create unique hierarchies and product assortments for seasonal purposes, targeting specific customer segments or business customers. For example, you may have a Spring sales catalog and a Fall sales catalog, as well as a Gold-rated Customer sales catalog.

You can manage your sales catalog from the WebSphere Commerce Accelerator and perform the following tasks:

- Create, change, or delete sales catalogs. You can create sales catalogs based on segments of your master catalog or start from scratch.
- Create, change, find, or remove categories. Select new parent categories and rearrange the category tree structure for a new look.
- Link a category. Take a category from one sales catalog to another sales catalog. That category, and all of its catalog entries will then be displayed in both, or more, sales catalogs.
- Duplicate the structure of a category. From your master or sales catalog, you can duplicate a section of categories and subcategories to preserve a similar structure.
- Assign, find, or remove catalog entries from different categories.

Sales catalogs can be used in conjunction with the master catalog and contracts to control which products display for a particular customer. If a customer is not entitled to see a subset of the products in the master catalog, the contract system will make sure that customer does not see those products in the WebSphere

Commerce store. The sales catalog can then be used to organize the products that the customer is entitled to see and purchase in a more meaningful way. For example, customers may buy products to support a business project. Instead of organizing products by department and subdepartment, it might be easier for the customer to find products when the products are arranged in a way that matches the components of their project. In this scenario, a top-level category might be titled Network Replacement Project and the subcategories in the sales catalog would be Hardware and Software.

10.3.7 Products: Catalog Import

Use this page to view your catalog data files.

File	The file name.
File Size	The size of the file.
Upload Time	The time stamp when the file was uploaded to the WebSphere Commerce Server.
Status	The status of the file: New, Processing, Processed, Failed, or Cancelled.
Upload Catalog	Uploads the catalog when clicked.
Upload Images	Uploads the catalog images when clicked.
Publish Catalog	Publishes the catalog when clicked.
View Logs	Accesses the logs when clicked.
Refresh	Refreshes the Status field when clicked.

In WebSphere Commerce, you can load the catalog data in one of two ways:

- Use the Catalog Management tools to create products one at a time.
- Use the Loader package to load the catalog data manually from an XML file.

As an alternative, you can create a simple catalog file in Comma Separated Value (CSV) format, which enables a merchant to upload the catalog data through the WebSphere Commerce Accelerator.

WebSphere Commerce provides sample catalog CSV worksheets to use as a guide when creating your own catalog CSV data. These sample worksheets may be found in the *wc_installdir*\samples\catalogimport directory. Also, this folder contains a ZIP file with thumbnail and full-size images for the catalog.

Note: Bundles and kits are not supported for the CSV catalog import method.

1. WebSphere Commerce configuration:

   As installed, WebSphere Commerce sets limits on the file size of the CSV format simple catalog file and ZIP images file. These limitations may be increased to a maximum file size of 1048576000 bytes, as defined in the *wc_installdir*\instances*wc_instance_name*\xml*wc_instance_name*.xml file. By default, the maximum upload file size for a CSV and a ZIP file is 100000000 bytes.

   a. Navigate to the *wc_installdir*\instances*wc_instance_name*\xml directory on the WebSphere Commerce Server machine.

   b. Open the *wc_instance_name*.xml file (demo).

   c. Search for CatalogUploadFile, which is found in the area of the XML file shown in Example 10-1.

Example 10-1 CatalogUploadFile property in <wc_instance_name>.xml file

```
<Command maxuploadsize="100000000"
         name="CatalogFileUpload"
         supportedFileExtension="csv,zip"
         uploadReturnURL_enabled="true"
         viruscheck="no" />
```

   d. Modify the `maxuploadsize` property to the maximum value: `1048576000`.

   Note: The size of simple catalog CSV and images ZIP files must be less than 1048576000 bytes. If this limit is exceeded, the files cannot be uploaded.

2. Locate sample catalog.csv and images.zip files on WebSphere Commerce Server:

   a. Navigate to the *wc_installdir*\samples\catalogimport directory on the WebSphere Commerce Server machine.

   b. This directory contains a catalog.csv file and an images.zip file that may be modified to create a simple catalog for the store that seller1admin is managing.

3. Modify the sample catalog.csv file:

   WebSphere Commerce provides a sample worksheet with nine sections for loading catalog data in CSV format:

   – category
   – categoryDescription
   – categoryRelation
   – product

- productDescription
- price
- categoryProductRelation
- attribute
- attributeValue

Contact your site administrator to access the sample worksheets.

Note: The first column in each row of a section must contain the name of the section. For example, each cell in the first column of the category section must contain the value `category`.

a. category

The category section information maps to the CATGROUP database table and contains the fields shown in Table 10-1 on page 298.

Table 10-1 Simple catalog CSV category section columns

Column name	Description
categoryName	(Required) The unique identifier of the category.
markForDelete	(Required) Use this field to mark a category for deletion: 0 = No (default). 1 = Yes.
field1	(Optional) A customizable string field.
field2	(Optional) A customizable string field.

b. categoryDescription

The categoryDescription worksheet information maps to the CATGRPDESC database table and has the fields shown in Table 10-2.

Table 10-2 Simple catalog CSV categoryDescription columns

Column name	Description
categoryName	(Required) The unique identifier of the category.
languageId	(Required) The language that this category description pertains to. Available language components are: -1 = US English, -2 = French, -3 = German, -4 = Italian, -5 = Spanish, -6 = Brazilian Portuguese, -7 = Simplified Chinese, -8 = Traditional Chinese, -9 = Korean, and -10 = Japanese.
displayName	(Required) The displayed name of the category.
shortDescription	(Required) A short description of the category.

Column name	Description
longDescription	(Required) A longer description of the category, if necessary.
published	(Required) Use this field to display the category in the language indicated by the languageId: 0 = No. 1 = Yes (default).
thumbnail	(Required) The relative or absolute path to the thumbnail image of the category.
fullImage	(Required) The relative or absolute path to the large image of the category.

c. categoryRelation

The categoryRelation worksheet information maps to the CATGRPREL database table and contains the fields shown in Table 10-3.

Table 10-3 Simple catalog CSV categoryDescription columns

Column name	Description
parent	(Mandatory) The name of the parent category. If this is a top category, the field is empty.
parentMemberId	(Optional) The owner ID of the category (default is the store owner ID). If your merchant is not using a shared master catalog, then this field should be empty.
child	(Required) The child category name.
sequence	(Required) The display sequence of the products in the category.

d. product

The product worksheet information maps to the CATENTRY and CATENTDESC database tables and has the fields shown in Table 10-4.

Table 10-4 Simple catalog CSV product columns

Column name	Description
partNumber	(Required) The unique identifier of the product.
parentPartNumber	(Mandatory) The parent product, if this is an item (also known as SKU). If this is a product, the field is empty.
type	(Required) The type of catalog entry: ProductBean or ItemBean.

Column name	Description
inventory	(Optional) The number of items in inventory for a particular item (SKU). For catalog entries with type of ProductBean, this field must not be filled.
markForDelete	(Required) Use this field to mark a product for deletion: 0 = No (default). 1 = Yes.
height	(Optional) A nominal height associated with the catalog entry.
length	(Optional) A nominal length associated with the catalog entry.
width	(Optional) A nominal width associated with the catalog entry.
sizeMeasure	(Optional) The unit of measurement used for the height, length, and width fields.
weight	(Optional) A nominal weight associated with the catalog entry.
weightMeasure	(Optional) The unit of measurement used for the weight field.
field1	(Optional) A customizable integer field.
field2	(Optional) A customizable integer field.
field3	(Optional) A customizable decimal field.
field4	(Optional) A customizable string field.
field5	(Optional) A customizable string field.

e. productDescription

The productDescription worksheet information maps to the CATENTDESC database table and contains the fields shown in Table 10-5 on page 301.

Table 10-5 Simple catalog CSV productDescription columns

Column name	Description
partNumber	(Required) The foreign key to the product's part number.
languageId	(Required) The language that this product description pertains to. Available language components are: -1 = US English, -2 = French, -3 = German, -4 = Italian, -5 = Spanish, -6 = Brazilian Portuguese, -7 = Simplified Chinese, -8 = Traditional Chinese, -9 = Korean, and -10 = Japanese.
displayName	(Required) The displayed name of the product.
shortDescription	(Required) A short description of the product.
longDescription	(Required) A longer description of the product, if necessary.
published	(Required) Use this field to display the product in the language indicated by the languageId: 0 = No. 1 = Yes (default).
thumbnail	(Required) The relative or absolute path to the thumbnail image of the product.
fullimage	(Required) The relative or absolute path to the large image of the product.
type	(Mandatory) The type of catalog entry: ProductBean. If the catalog entry is of ItemBean type, the field must not be filled.

f. price

The price worksheet information maps to the OFFER and OFFERPRICE database tables and contains the fields shown in Table 10-6.

Table 10-6 Simple catalog CSV price columns

Column name	Description
partNumber	(Required) The foreign key to the product's part number.
memberId	(Optional) The owner ID of the catalog entry. (Default is the store owner ID.) If your merchant is not using a shared master catalog, then this field should be empty.
price	(Required) The price of the catalog entry.

Column name	Description
currency	(Required) The currency of the price.
precedence	(Optional) The precedence that determines the price of a catalog entry.
startDate	(Required) The date that the price becomes available.
endDate	(Required) The date that the price is withdrawn.
field1	(Optional) A customizable string field.
field2	(Optional) A customizable character field.

g. categoryProductRelation

The categoryProductRelation worksheet information maps to the CATGRPREL database table and contains the fields shown in Table 10-7.

Table 10-7 Simple catalog CSV categoryProductRelation columns

Column Name	Description
categoryName	(Required) The parent name of the category.
categoryMemberId	(Optional) The owner ID of the category. (Default is the store owner ID.) If your merchant is not using a shared master catalog, then this field should be empty.
partNumber	(Required) The child product's part number.
sequence	(Required) The display sequence of the category.

h. attribute

The attribute worksheet information maps to the ATTRIBUTE database table and contains the fields shown in Table 10-8.

Table 10-8 Simple catalog CSV attribute columns

Column name	Description
parentPartNumber	(Required) The foreign key to the product's part number.
languageId	(Required) The language that this attribute pertains to. Available language components are: -1 = US English, -2 = French, -3 = German, -4 = Italian, -5 = Spanish, -6 = Brazilian Portuguese, -7 = Simplified Chinese, -8 = Traditional Chinese, -9 = Korean, and -10 = Japanese.

Column name	Description
attributeType	(Required) The type of attribute: FLOAT, INTEGER, or STRING.
attributeName	(Required) The name of the attribute.
description	(Required) A description of the attribute.
description2	(Optional) An additional description of the attribute, if necessary.
sequence	(Required) The display sequence of the attribute.
field1	(Optional) A customizable string field.

i. attributeValue

The attributeValue worksheet information maps to the ATTRVALUE database table and contains the fields shown in Table 10-9.

Table 10-9 Simple catalog CSV attributeValue columns

Column name	Description
itemPartNumber	The foreign key to the product's part number.
parentPartNumber	(Required) The foreign key to the product's part number.
languageId	(Required) The language that this attribute value pertains to. Available language components are: -1 = US English, -2 = French, -3 = German, -4 = Italian, -5 = Spanish, -6 = Brazilian Portuguese, -7 = Simplified Chinese, -8 = Traditional Chinese, -9 = Korean, and -10 = Japanese.
attributeType	(Required) The type of attribute: FLOAT, INTEGER, or STRING.
attributeName	(Required) The name of the attribute.
attributeValue	(Required) The attribute value.
sequence	(Required) The display sequence of the attribute value.
field1	(Optional) A customizable integer field.
field2	(Optional) A customizable string field.
field3	(Optional) A customizable string field.

4. Compress the image files into an images.zip file.

   Note:

   - The images.zip file may be no larger than 1048576000 bytes.
   - Images included in the zip file must be in JPG or GIF format.
   - The Web page designer should be careful to inspect HTML and JSP files to make sure that the resolution of image files is properly sized for the location they appear on storefront pages.

To import a simple catalog into your store:

1. From the Products menu, select **Catalog Import**.
2. Click **Upload catalog**.
3. Select **UTF-8** from the catalog file encoding pull-down list.
4. Click **Browse**.
5. Select the **Sample CSV Load/catalog.csv** file on the machine.
6. Click **Upload File**.
7. Click **OK** to confirm that the CSV file has been uploaded successfully.
8. Check the box next to the **catalog.csv** file.
9. Click **Upload Images**.
10. Click **Browse**.
11. Select the **Sample CSV Load/images.zip** file on the machine.
12. Click the top-level folder, making sure the folder plus associated text is highlighted.

    Note: Images cannot be uploaded unless a folder is chosen before the Upload button is clicked.

13. Click **Upload**.

14.The WebSphere Commerce Accelerator provides a summary of image files that were extracted from the images.zip file to the target store.

15.Click **Catalog Import** in the upper-right corner of the window (under the manage store banner).

16.Select the check box next to the **catalog.csv** file.

17.Click **Publish Catalog**.

18.To update the publishing status, select the check box next to the **catalog.csv** file and click **Refresh**. Eventually the status will change to Published. This signifies that the catalog was loaded to the target store successfully.

19.Select the check box next to the **catalog.csv** file.

20.The View Logs button is grayed-out because the publish was successful and no error logs are available to view.

Error logs that help identify issues with catalog publishing issues may be found in this directory on the WebSphere Commerce Server machine:

wc_installdir\instances*wc_instance_nam*>\temp\catalogimport*store_id*

Location of store catalog images on server

The store catalog images may be found at the following location on the WebSphere Commerce Server machine:

was_installdir\installedApps*host_name*\WC_*wc_instance_name*.ear\Stores.war*store_name*\images

For example:

```
C:\WebSphere\installedApps\cmw2kpro1\WC_demo.ear\Stores.war\B2C1\images
```

10.4 B2B Direct Storefront Asset Store

To perform functions that affect all functioning stores that were created from the B2B Direct Storefront Asset Store, access the WebSphere Commerce Accelerator and select the B2BDirectStorefrontAssetStore in the Store name list box. After you click OK, the following menu will be displayed, possibly varying by the role assigned to the current user:

- Sales
  - Accounts
- Marketing
  - Customer Segments
  - Campaigns
  - Campaign Activities
  - Promotions

  - E-Marketing Spots
  - Ad Copy

The following predefined roles have access to one or more options on the WebSphere Commerce Accelerator menu when the B2B Direct Storefront Asset Store is selected:

- Account Representative
  - Sales
    - Accounts
- Marketing Manager
  - Marketing
    - Customer Segments
    - Campaigns
    - Campaign Activities
    - E-Marketing Spots
    - Ad Copy
- Sales Manager
  - Sales
    - Accounts
- Seller
  - Sales
    - Accounts

10.4.1 Sales: Accounts

Business accounts represent the relationship between a store and the store's customer organizations and are the starting point for managing business relationships. Using business accounts, you can track contracts and orders for customer organizations and configure how buyers from customer organizations shop in a store. Topics closely related to business accounts are:

- Purchase order
- Credit line
- Invoices
- Display customization
- Contracts

A business account contains the following information about a customer organization:

- The name of the customer organization and a contact person in the organization.
- The department and name of the account representative from the store who is assigned to the customer organization.

- Information about purchase orders that a customer organization has with a store.
- How invoices are delivered to the customer organization.
- Whether the customer organization has a credit line.
- Any display customization information for the business customer. Store pages can be customized for a business account by specifying a piece of HTML code that can be used by a store's JavaServer Pages (JSP) files.
- Any general remarks about the business account.

Also, business accounts control customer entitlement by controlling the ability of buyers from customer organizations to access a store's master catalog and see standard pricing for products in the master catalog. If a customer organization is not entitled to purchase products in the store's master catalog at standard prices, they are limited to products and prices covered by contracts that the customer organization has with a store.

Before creating a business account for a customer organization, this organization must already exist in WebSphere Commerce. Also, at least one person associated with the customer organization should be a registered customer because a contact at the customer organization is required when creating a business account.

The first window that opens shows a list of customer accounts that already exist.

Three columns of information are displayed for each defined customer account:

Customer	The name of the company holding the account
Representative	The name of the representative organization within the seller's organization that is responsible for the account
Number of contracts	The number of contracts that belong to the account

The seller administrator can accomplish the following tasks:

- Create a new customer account.
- Modify a customer account.
- Create a new contract for a customer account.
- List existing contracts for a customer account.
- View orders for a customer account.
- Display a summary of account information.
- Display reports for a customer account.
- Delete a customer account.

Create a new customer account

1. From the Sales menu, select **Accounts**.

2. Click **New**.
3. Click **Customer** in the left navigation bar. Do not click **OK** until all information has been defined for the new customer account.
4. Supply this information:

   Customer Organization Choose the name of the account holder from the pull-down list.

   Contact Choose the name of the primary contact person in the customer's organization.

   Address This read-only field displays the address of the selected contact.

   Contact Information Type additional information for the contact, such as details about when to call.

   Allow customers to purchase under the store's default contract
   Select this option to enable customers from this account to make purchases for items that are not defined for the contract, but are defined by the default contract for the store.

5. Click **Representative** to define the customer account representative:

   Department (Mandatory) Select the name of the department within the seller's organization that is responsible for the account.

   Representative Select the name of the primary account representative in the selected department.

   Address This read-only field displays the address of the selected representative.

6. Click **Purchase Order** to define purchase orders for the customer account.
7. Check the appropriate box or boxes:

   Purchase order number may be specified at time of order
   Select this option to enable customers to specify purchase order numbers when submitting an order.

   Check the uniqueness of the purchase order number
   This option is displayed when the previous option is selected. Select this option if you want to verify that any purchase order number specified at time of purchase is unique.

   Defined purchase orders are displayed in a table with column names Purchase Order Number and Spending Limit.

The following actions are available when defining a purchase order:

Add	Defines a new purchase order for the current account.
Change	Changes the selected purchase order.
Remove	Removes the selected purchase order.

a. These options appear when you click **Add**:

Purchase Order Number
Type the number for the new purchase order (mandatory).

Spending Limit Select this option to define a spending limit for the purchase order.

Amount Specify the amount if the spending limit option is selected. (mandatory) Type the limit for the purchase order in the field provided, and then select the currency for the limit from the list.

b. To change a purchase order:

i. Check the box next to the purchase order number and click **Change**.

ii. Modify the purchase order number and spending limit as desired.

iii. Click **OK** to apply changes to purchase order.

c. To remove a defined purchase order for the selected account:

i. Check the box next to the purchase order number and click **Remove**.

ii. Click **OK** on the dialog box.

8. Click **Invoicing** to define how invoices for the customer account are delivered:

E-mail	Select this option to deliver invoices using e-mail.
Include with shipment	Select this option to deliver invoices inside the boxes used to ship the order.
Regular mail	Select this option to deliver invoices using conventional mail.

9. Click **Credit Line** to define how invoices for the customer account are delivered:

The account has a credit line
Select this option to enable the account to use credit to pay for orders.

Description Type the name the customer sees when selecting a credit line from a list of payment options (mandatory).

Credit line account number
Enter details about the credit line.

Billing Address	Select the address to use for account billing.
Address	Displays information for selected billing address (read-only).

10.Click **Remarks**. Specify additional comments for the customer account.

11.Click **OK**.

12.Click **OK** to close the dialog box.

Modify a customer account

1. From the **Sales** menu, select **Accounts**.
2. Select the check box next to the account whose details will be modified.
3. Click **Change**.
4. Click the appropriate links to modify account information. The following links appear in the left navigation bar:
   - Customer
   - Representative
   - Purchase Order
   - Invoicing
   - Credit Line
   - Remarks
5. Click **OK** when all changes are complete. This returns you to the Accounts home page with a list of existing customer accounts.

Create a new contract for a customer account

To create a new contract for a selected customer:

1. From the Sales menu, select **Accounts**.
2. Select the check box next to the business account for which the contract is being created.
3. Click **New Contract** to launch the Contract notebook.
4. Complete the fields for each page as required, and use the links on the left side to switch between pages.
5. Click **OK** to save the contract and close the notebook.

   The contract is displayed in the Contract List page.

List existing contracts for a customer account

1. From the Sales menu, click **Accounts**. The Account List page displays, containing business accounts currently defined for the selected store.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Select the check box next to the business account that you want to view the contracts for.
3. Click **Contracts**.

   The Contract List page opens, showing contracts under the account selected.

View orders for a customer account

1. From the Sales menu, click **Accounts**. The Account List page displays, showing business accounts currently defined for the selected store.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Check the box next to the business account that you want to view orders for.
3. Click **Orders**.

   The Order List page opens, showing orders under the account selected.

Display a summary of account information

1. From the Sales menu, click **Accounts**. The Account List page displays, containing business accounts currently defined for the selected store.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Select the check box next to the business account that you want to view.
3. Click **Summary**. The Account Summary page opens, showing information about the selected business account.
4. When you are finished, click **OK** to return to the previous page.

Display reports for a customer account

1. From the Sales menu, click **Accounts**. The Accounts list opens, showing the accounts defined for the store.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Select the check box next to an account.

3. Click **Reports**. The Account Management Reports list displays.
4. Click the title of the report you want to review. The selected report displays.

   Six reports are available to help manage accounts and contracts efficiently:

   - Orders by account report

     Review orders for the selected account balance.

   - Limits of limited purchase orders by account report

     Review the current balance and the limit of purchase orders for the selected account.

   - Refund by account report

     Review the refunds issued to the selected account.

   - Contracts close to expiry date

     Review the contracts for the selected account that are close to expiring.

   - Orders by contract report

     Review orders for the selected contract.

   - Refund by contract report

     Review the refunds issued to the selected contract.

Delete a customer account

Note: Deleting a customer account sets a flag in the database on the deleted record. The record is not actually removed from the database until the DBClean function is run. You cannot add any new accounts for the associated customer's organization until after DBClean is run on Account objects.

1. From the Sales menu, select **Accounts**.
2. Select the check box next to the account to be deleted.
3. Click **Delete**.

10.4.2 Marketing: Customer Segments

A customer segment incorporates registration information, demographics, address information, customer culture, purchase history, and other miscellaneous attributes that define a dynamic group of customers or accounts. Customer segments serve as targets for advertising, promotions, and suggestive selling. You must create customer segments before creating campaigns.

Segments are considered dynamic because customers belong to them based on their personal data and purchase history, both of which may change. For example, you might create segments based on a customer's registration status. If you create a segment that requires customers to be registered to qualify, an unregistered customer will be excluded. If that same customer registers at a later date, they would then become a member of that target segment, and would continue to be a member until the segment is deleted.

Customer segments also support static criteria. You can explicitly include or exclude particular customers or accounts, which overrides any defined dynamic criteria. In this way, for example, you can include a customer in a segment that they would otherwise not match, or exclude an account from a segment that it would otherwise match.

Create a new customer segment

To create a new customer segment:

1. Open the WebSphere Commerce Accelerator.
2. Select **Marketing** → **Customer Segments**.

   The Customer Segments page displays, containing the customer segment currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Click **New**. The Customer Segment notebook displays.
4. Complete the fields for each page as required, and use the links on the left side to switch between pages.
5. Click **OK** to save the segment and close the notebook. The customer segment is displayed in the Customer Segments list.

Change a customer segment

To change a customer segment:

1. Open the WebSphere Commerce Accelerator.
2. Select **Marketing** → **Customer Segments**. The Customer Segments page displays, containing the customer segments currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the customer segment that you want to change.
4. Click **Change** to launch the Customer Segment notebook.
5. Update fields for each page as needed; use the left-side links to switch pages.
6. Click **OK** to save the updated segment and close the notebook.

View a customer segment summary

To view a customer segment summary:

1. Open the WebSphere Commerce Accelerator.
2. Select **Marketing → Customer Segments**.

   The Customer Segments page displays, containing the customer segments that are defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the customer segment that you want to view.
4. Click **Summary**. The Customer Segment Summary page displays information about the selected customer segment. Click **OK** when you are finished.
   - To change any of the information about the customer segment, click **Change**. This launches the Customer Segment notebook.
   - To delete the customer segment, click **Delete**. This deletes the segment and return to the Customer Segment page.
   - To create a new segment by duplicating this segment, click **Duplicate**. This launches the Customer Segment notebook with all of the data from the current segment.

Delete a customer segment

To delete a customer segment:

1. Open the WebSphere Commerce Accelerator.
2. Select **Marketing → Customer Segments**.

   The Customer Segments page displays, containing the customer segments currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the customer segment that you want to delete.
4. Click **Delete**. The page should display the updated list of customer segments.

   Note: Customer segments that are currently associated with an active campaign activity cannot be deleted.

10.4.3 Marketing: Campaigns

Campaigns serve to organize your marketing efforts. Campaigns are typically created by either a Marketing Manager or a merchant. They are often associated with a certain set of objectives. For instance, a "Back to School" campaign may have an objective of increasing sales of children's clothes during the campaign.

Within WebSphere Commerce, campaigns contain any number of campaign activities, which are classified as either e-mail activities or Web activities. Web activities generate targeted content for the customers when defined conditions are evaluated to be true. E-mail activities deliver merchandising messages to customers. The result is that a campaign is the high-level marketing element that organizes the activities.

Create a campaign

To create a new campaign:

1. Open the WebSphere Commerce Accelerator.
2. Select **Marketing** → **Campaigns**.

   The Campaigns list displays, containing the campaigns currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Click **New**. The New Campaign wizard launches, enabling you to define your campaign.
4. Enter the campaign name.
5. Enter a campaign description, such as `20% off order coupon`. This description will appear in the Campaign List window, and helps to identify the campaign.
6. Click **Next**. The Business Objectives Definition page displays.
7. Enter a campaign sponsor and campaign objectives.
8. Complete each page as required selecting the values appropriate for the campaign you want to create.
9. Click **Finish** to save the campaign. The campaign is displayed in the Campaigns list.

Note: You must create activities before this campaign can be used.

Change a campaign

To change a campaign:

1. Open the WebSphere Commerce Accelerator.
2. Select **Marketing** → **Campaigns**.

   The Campaigns list displays, containing the campaigns currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the campaign that you want to change.
4. Click **Change**. The Campaign notebook displays the information for the selected campaign.
5. Update each page as required, selecting the values appropriate for the changed campaign.
6. Click **OK** to save the changed campaign.

Delete a campaign

To delete a campaign:

1. Open the WebSphere Commerce Accelerator.
2. Select **Marketing** → **Campaigns**.

   The Campaigns list displays, containing the campaigns currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the campaign that you want to delete.
4. Click **Delete**. The campaign will be deleted from the Campaign list.

10.4.4 Marketing: Campaign Activities

This option enables you to maintain campaign activities, of which there are two distinct types:

- Web activities
- E-mail activities

Web activities

Web activities, typically created by a Marketing Manager, serve to generate your targeted marketing content. They can be associated with a campaign that has a collection of activities. For example, if an office supply store had a "Back to School" campaign, the Web activities would be responsible for lower-level

actions, such as advertising a discount on pens or suggesting lined paper to any customer who has registered and listed their occupation as a student.

Web activities can display three types of dynamic content:

- *Suggestive selling* content is designed to provide rule-based product recommendations, targeted at a specific customer audience, based on a customer's segment and other customers' behavior. Web activities displaying this type of content are intended to create cross-sell and up-sell opportunities.
- *Collaborative filtering-based recommendations* are also intended to create product recommendations, but they use a different recommendation algorithm, which targets items based on customers' overall behavior, rather than predefined rules.
- *Awareness advertisements* are designed to provide advertising content targeted at a specific customer audience based on the same criteria as those used for suggestive selling. They are intended to increase a customer's awareness about activities at the online store, highlight special offers, and to increase brand awareness.

Web activities can be incorporated into any page on the site. When the site is designed, special placeholders, called e-Marketing Spots, are placed on the site. When displayed to a customer, these placeholders are replaced by the specific targeted content. Target locations are assigned by scheduling Web activities to display in e-Marketing Spots in the desired locations.

Web activities contain a condition that determines when and to whom they are displayed. This is defined when the activity is created and can be changed during the lifetime of the activity to adjust its visibility and the displayed content.

Web activities generate statistics about their use. These statistics can be viewed using the WebSphere Commerce Accelerator by users in the Seller or Marketing Manager roles. The statistics illustrate an activity's clickthrough rate for each e-Marketing Spot where it is implemented and provide feedback about the effectiveness of the Web activity, as well as comparative success rates among the various locations in which it displays.

E-mail activities

E-mail activities deliver news and promotions to customers using e-mail. See 2.8, "E-mail activities" on page 58 for a complete description.

10.4.5 Marketing: Promotions

Promotions enable you to offer customers incentives to purchase. WebSphere Commerce supports numerous types such as price promotions, including simple discounts, and merchandise specials such as gifts with purchase, and buy one get one; service promotions, such as reduced shipping costs; and coupon promotions that mimic paper coupons you might find in your local newspaper. Promotions are created and managed using the Promotions tool in the WebSphere Commerce Accelerator. After they are created, they must be deployed to the production server to be available to customers.

Promotions can be associated with your marketing campaigns so that they are factored into any statistics gathered for the campaign to which the promotion belongs. Additionally, you can assign a promotion code to your promotion.

For more information about promotions, search for "promotions" in the WebSphere Commerce Information Center.

10.4.6 Marketing: e-Marketing Spots

e-Marketing Spots reserve space on your store pages to display personalized marketing content. The e-Marketing Spots are used during page creation to reserve space for the dynamic content that will be shown to your customers. When a page is requested by a customer, any e-Marketing Spots present on the page will communicate with the rule server to process the rule-based code associated with the spot. Each e-Marketing Spot has one or more Web activities associated with it. e-Marketing Spots are supported by special data beans that are used in conjunction with JavaServer Pages technology to generate Web page content using the WebSphere Commerce rule processing system.

e-Marketing Spots are created using the e-Marketing Spot wizard in the WebSphere Commerce Accelerator. Placement and creation of e-Marketing Spots must be determined collaboratively between the merchant responsible for the content, the page designer responsible for creating JSP files, and the media designer assigned to create any graphics or text displayed in the spot. This ensures that the spots are implemented in a way that provides adequate space and retains the site design's aesthetics. e-Marketing Spots should be named descriptively to include their location, such as CheckOutPageRecommendation or HomePageAd. This helps to reduce confusion about where it will appear and what content it should contain. If necessary, numbers can be added to the name to differentiate between two e-Marketing Spots appearing on the same page. e-Marketing Spot names must be valid Java identifiers.

The page designer is responsible for providing the appropriate e-Marketing Spots on the required pages and in the specified locations. The e-Marketing Spots are

defined using a generic WebSphere Commerce bean: the EMarketingSpot bean. The name property of this bean must be specified for each required e-Marketing Spot. This ensures that each e-Marketing Spot is unique. This bean can be found in the WebSphere Commerce development environment.

The example e-Marketing Spot supports four types of Web activities:

- Product recommendation
- Category recommendation
- Awareness advertisement
- Merchandising association

Different properties of the bean can be used to customize your e-Marketing Spot and the corresponding Web activity.

This option is used to maintain a information related to an e-Marketing spot in the WebSphere Commerce database. To maintain this information:

1. Access the WebSphere Commerce Accelerator.
2. Select **B2BDirectStorefrontAssetStore** from the Store name list.
3. Select **Marketing** → **E-Marketing Spots**. The E-Marketing Spots list page is displayed.

From this page, you have several capabilities:

- Create a new e-Marketing Spot
- Change an existing e-Marketing Spot
- Display summary information for an e-Marketing Spot
- Delete an e-Marketing Spot

10.4.7 Marketing: Ad Copy

Ad copy refers to all support material created for your campaigns. This material is typically created by writers and graphic. Ad copy must include display content, such as product pictures, graphics used in advertising, or marketing text supporting products.

All awareness advertisements require ad copy to be defined in the WebSphere Commerce database prior to its use on the site. Therefore, the marketing and creative departments must communicate prior to a campaign to establish requirements. After the ad copy is defined, it can be referenced when creating campaigns and will be displayed as appropriate.

This option is used to maintain information related to Ad Copy in the WebSphere Commerce database. To maintain this information:

1. Access the WebSphere Commerce Accelerator.

2. Select the **B2BDirectStorefrontAssetStore** from the Store name list.
3. Select **Marketing → Ad Copy**. The Ad Copy list page is displayed.

From this page, you have the capabilities described in the following sections.

Create ad copy

To create new ad copy:

1. From the Ad Copy page, click **New**. The Ad Copy wizard launches, enabling you to define your ad copy.
   a. Enter a name for your ad copy.
   b. Select a type from the list:
      - Image
      - Flash
      - Text
   c. Specify the click action.

      If **Select WebSphere Commerce command as click action** is checked, select a command from the list and enter the appropriate value in the field provided:
      - Display Product
      - Display Category
      - Add to Shopping Cart
      - Add to Interest List
      - Display Promotion
      - Add Promotion to customer's coupon collection
      - Add Product to Shopping Cart with Promotion

      If **Specify URL as click action** is checked, enter the fully-qualified URL in the field provided.
   d. Enter the location of the ad copy file in the File location field. This value is the relative path name of the image file with respect to the store home directory, which is:

      `*WAS_installdir*/InstalledApps/WC_*Enterprise_App_instance_name*.ear/wcstores.war/*store_nam*>`
   e. In the Marketing text box, type the text that will be displayed with the ad copy in the store.
2. Click **Finish** to save the ad copy. The ad copy is displayed in the Ad Copy List.

Change Ad Copy

To change defined ad copy:

1. From the Ad Copy page, select the check box next to the ad copy that you want to change.
2. Click **Change**. The Ad copy wizard launches, populated with the defined information about the selected ad copy.
3. Change the information for the selected ad copy.
4. Click **Finish** to save the updated ad copy information.

Preview Ad Copy

To preview ad copy:

1. From the Ad Copy page, select the check box to the left of the ad copy that you want to preview.
2. Click **Summary**. The Ad Copy Summary page displays.
3. Click **Close** when you are finished previewing the ad copy.

Delete Ad Copy

To delete ad copy:

1. From the Ad Copy page, select the check box to the left of the ad copy that you want to delete.
2. Click **Delete**.

   The deleted ad copy will be removed from the list.

Note: Removing ad copy does not remove the associated campaign initiative and e-Marketing Spot schedule.

When ad copy for an existing e-Marketing Spot is removed, the dynamic content for the deleted ad copy will not be displayed on the store page.

10.5 Consumer Direct Storefront Asset Store

To perform functions that affect all functioning stores that were created from the Consumer Direct Storefront Asset Store, access the WebSphere Commerce Accelerator and select the **ConsumerDirectStorefrontAssetStore** in the Store name list box. After you click **OK**, the following menu is displayed, possibly varying depending on the role assigned to the current user:

- Marketing
  - Customer Segments
  - Campaigns
  - Campaign Activities
  - Promotions
  - E-Marketing Spots
  - Ad Copy

The Marketing Manager has access to one or more options on the WebSphere Commerce Accelerator menu when the Consumer Direct Storefront Asset Store is selected:

- Marketing Manager
  - Marketing
    - Customer Segments
    - Campaigns
    - Campaign Activities
    - E-Marketing Spots
    - Ad Copy

10.5.1 Marketing: Customer Segments

This functionality is the same whether you are running a B2B direct or consumer direct store. For information about how to define and maintain customer segments, see 10.4.2, "Marketing: Customer Segments" on page 312.

10.5.2 Marketing: Campaigns

This functionality is the same whether you are running a B2B direct or consumer direct store. For information about how to define and maintain campaigns, see 10.4.3, "Marketing: Campaigns" on page 315.

10.5.3 Marketing: Campaign Activities

This functionality is the same whether you are running a B2B direct or consumer direct store. For information about how to define and maintain campaign activities, see 10.4.4, "Marketing: Campaign Activities" on page 316.

10.5.4 Marketing: Promotions

This functionality is the same whether you are running a B2B direct or consumer direct store. For information about how to define and maintain promotions, see 10.4.5, "Marketing: Promotions" on page 318.

10.5.5 Marketing: e-Marketing Spots

This functionality is the same whether you are running a B2B direct or consumer direct store. For information about how to define and maintain e-Marketing Spots, see 10.4.6, "Marketing: e-Marketing Spots" on page 318.

10.5.6 Marketing: Ad Copy

This functionality is the same whether you are running a B2B direct or consumer direct store. For information about how to define and maintain ad copy, see 10.4.7, "Marketing: Ad Copy" on page 319.

Manage a consumer direct store

This chapter describes the functions that are available to manage an Extended Sites store that was created from a consumer direct asset store, such as the Consumer Direct Storefront Asset store. All functions are accessed through the WebSphere Commerce Accelerator.

This chapter contains the following sections:

- Overview
- Store menu
- Marketing menu
- Merchandise menu
- Auctions menu
- Operations menu
- Reports menu

11.1 Overview

This is the menu structure in the WebSphere Commerce Accelerator for a store that was built on the business-to-consumer model asset store. The out-of-the-box asset store that is created when the Extended Sites store archive is published is called *Consumer Direct Storefront Asset Store*.

Only options to which the user has access are displayed to the user.

- Store
  - Open/Close
  - Change Profile
  - Change Pages
  - Upload Logo
  - Change Style
  - Manage Files
  - Change Flow
  - Change Shipping
  - Change Tax
  - Payment Settings
  - Message Type Configuration
  - Report Delivery Settings
  - Fulfillment Centers
  - Return Reasons
  - Inventory Adjustment Code
- Marketing
  - Customer Segments
  - Campaigns
  - Campaign Activities
  - Promotions
  - E-Marketing Spots
  - Ad Copy
  - Experiments
- Merchandise
  - Catalog Management
  - Find Catalog Entries
  - Find Categories
  - Find Bundles or Kits
  - Find Merchandising Associations
  - Sales Catalogs
  - Catalog Filter
  - Catalog Import
  - Expected Inventory
  - Vendors

- Auctions
  - Auctions
  - View Auctions
  - Find Auctions
  - Auction Styles
  - Bid Rules
- Operations
  - Create a New Customer
  - Find Customers
  - Find Orders
  - Place Guest Order
  - Customer Care
  - Customer Care Queue
  - Returns
  - Find Returns
  - Pick Batches
  - Releases Ready to Ship
  - Expected Inventory
  - Find Inventory
  - Approve Payment
  - Deposit Payment
  - Settle Payment
  - Find Payment
  - Find Payment Batch
- Reports
  - Inventory Reports
  - Order Management Reports
  - Operational Reports

This chapter describes the functionality of these options, with some exceptions. If a similar function is described in a previous chapter in this book, a reference to the appropriate section is provided along with a discussion of any differences in the function between a customer-facing store and an asset store in the WebSphere Commerce Accelerator.

Note: Discussion of the Customer Care feature is outside the scope of this book.

11.1.1 Roles

The following predefined roles have access to one or more options on the WebSphere Commerce Accelerator menu for an Extended Sites store based on a consumer direct business model asset store such as Consumer Direct Storefront Asset Store:

- Seller
  - Has access to all WebSphere Commerce Accelerator menus and tasks
- Category Manager
  - Store
    - Return Reasons
    - Inventory Adjustment Code
  - Marketing
    - Promotions
  - Merchandise
    - Catalog Management
    - Find Catalog Entries
    - Find Categories
    - Find Bundles or Kits
    - Find Merchandising Associations
    - Catalog Filter
    - Catalog Import
    - Expected Inventory
    - Vendors
    - Discounts
    - Coupon Promotions
  - Auctions
    - Auctions
    - Find Auctions
    - Auction Styles
    - Bid Rules
  - Reports
    - Inventory Reports
    - Order Management Reports
    - Operational Reports
- Marketing Manager
  - Marketing
    - Customer Segments
    - Campaigns
    - Campaign Activities
    - Promotions
    - E-Marketing Spots
    - Ad Copy
  - Merchandise
    - Catalog Management

    - Find Catalog Entries
    - Find Categories
    - Find Bundles or Kits
    - Find Merchandising Associations
- Operations Manager
  - Store
    - Open/Close
    - Change Shipping
    - Report Delivery Settings
    - Fulfillment Centers
    - Return Reasons
    - Inventory Adjustment Code
  - Auctions
    - View Auctions
  - Operations
    - Create New Customer
    - Find Customers
    - Find Orders
    - Place Guest Order
    - Returns
    - Find Returns
    - Pick Batches
    - Releases Ready to Ship
    - Expected Inventory
    - Find Inventory
    - Approve Payment
    - Deposit Payment
    - Settle Payment
    - Find Payment
    - Find Payment Batch
  - Reports
    - Inventory Reports
    - Order Management Reports
    - Operational Reports
- Pick Packer
  - Operations
    - Pick Batches
    - Releases Ready to Ship

11.1.2 Access

To open the WebSphere Commerce Accelerator:

1. Access the following Web address in your browser:

   `https://host_name:8000/accelerator`

   host_name is the fully-qualified WebSphere Commerce Web server host name. The host name may be a virtual host name on the Web server.

2. From the WebSphere Commerce Logon page, type your WebSphere Commerce user name and password. The Select Store and Language page displays.

   Note: If only one store, one language, and one or no fulfillment centers are defined, the Select Store and Language page is bypassed to go directly from the WebSphere Commerce Accelerator logon page to the home page.

3. Specify the name of the store you want to work. If you are authorized to work with a single store, the store name is preselected. If not:

   a. Select the name of the store from the Store name pull-down list.

   b. If there are numerous stores to list, the system may prompt you to use the options under Find a store to search for a store, as follows:

      i. Under Find a store, in the Store name field, type the all or part of the store name and from the pull-down list beside this field, select how you want the system to perform your search.

      ii. Click **Find**.

   c. To list all stores you are authorized to work with, select **List All**.

   Note: This chapter deals with customer-facing Extended Sites that were built using the consumer direct store model. Selecting any other types of stores will not produce the same results.

4. If you are assigned a role with fulfillment duties, select the name of the fulfillment center associated with the store from the Fulfillment center pull-down list.

5. From the Language to work in pull-down list, select the language in which you want to administer the store. If you are authorized to work with a single language, the language is preselected. If you are authorized to work with more than one of the WebSphere Commerce supported languages, the store's default language is preselected; however, you can select a different language from this list.

6. Click **OK**. The WebSphere Commerce Accelerator home page displays. Select the menu and menu option you want to work with. If you do not see the menu or menu option, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.

11.2 Store menu

This menu provides access to functions that affect the appearance and flow of the storefront.

11.2.1 Store: Open/Close

From the Store menu, select **Open/Close**.

- When the store is open, click **Close Store** to close it.
- When the store is closed, click **Open Store** to open it.

11.2.2 Store: Change Profile

Use the Change Profile wizard in the WebSphere Commerce Accelerator to change the store name, store description, store contact information, store location information, language, and currency:

1. From the Store menu, select **Change Profile**. The Store Profile notebook opens.
2. Change information as appropriate:
   - To change the store name or store description, select **General**.
   - To change the store contact information, select **Contact**. This is the contact information that is displayed when a customer clicks Contact Us from any store page.
   - To change the location of store, select **Location**.
   - To change the languages available in the store, select **Languages**. The languages that you choose here display on the Select a Language list on the navigation frame of all store pages. Note that if only one language is available, the Select a Language list does not appear.
   - To change the currencies that will be available in the store, select **Currency**. The currencies that you choose here display on the Select a Currency list on the navigation frame of all store pages. Note that if only one currency is available, the Select a Currency list does not appear.
3. Click **OK** to save your changes and exit the Store Profile page.
4. To see the changes in the store, launch the store's home page.

11.2.3 Store: Change Pages

Using the WebSphere Commerce Accelerator, you can change all text displayed on store pages. Most text can be changed by using **Store → Change Pages**; however, some text can only be changed by modifying properties files.

The method that you use to depends on the text:

- For text such as the privacy policy and location, and in notification messages, use the Change Page dialog WebSphere Commerce Accelerator. The fields that are available for modification out-of-the-box are listed by location:
  - Home - Top
  - Home - Bottom
  - Home - Title
  - Help
  - Privacy policy
  - Privacy statement
  - Contact us
  - Shopping cart message
  - Merchandising Associations cross-sell
  - Merchandising Associations up-sell
  - Merchandising Associations product accessories
  - Merchandising Associations product replacement
  - Registration - E-mail options
  - My Account - Personal information
  - My Account - Address book
  - My Account - Wishlist
  - My Account - Quick checkout profile
  - My Account - Order tracking
  - Order summary - Cash on delivery (C.O.D) payment method
  - Order summary - Bill Me payment method
  - Order summary - Pay later payment method
  - Order summary - Security
  - Order confirmation - Credit card
  - Order confirmation - Cash on delivery (C.O.D)
  - Order confirmation - Bill me payment method
  - Order confirmation - Pay later payment method
  - Order authorized notification
  - Order canceled notification
  - Order received notification
  - Order shipped notification
  - Password notification
  - Wish list message
- To change all other text (including error messages, labels for fields, and the text in the header, footer, or sidebar), modify the Properties file.

To change the text in your store:

1. From the Store menu, select **Change Pages**.
2. Click the arrow next to the text to be changed. This opens a text box containing the current text of the message.

   Note: The text displayed in the scroll box for each page may contain programming conventions, including HTML tagging, and placeholders for variables that are retrieved from the database.

   - HTML tagging: An example of HTML tagging is Personal information, which means that "Personal Information" displays in boldface when rendered by a browser. If you want to change the way the font displays on the page, you will need an understanding of HTML.
   - Database placeholders: A placeholder for a database variable displays as follows:

     {0} respects your privacy, where {0} is the placeholder. If you want to maintain these placeholders do not change them.
   - Adding links: If you want to add links to other pages, you must add the prefix `/wcsstore` to the front of the file path. For example, <img src="/wcsstore/Reseller/upload/folder name/your image.jpg">, where Reseller is the name of the store directory you specified when creating your store.

3. Click **View Location** to see where on the page the text will be displayed. A new browser window opens.
4. Close the preview window.
5. Make any desired changes to the text. You can change as many of the text fields as you like in the same session. When you are through, click **OK**.

11.2.4 Store: Upload Logo

Use the Upload Logo wizard to upload and replace the store logo:

1. From the Store menu, select **Upload Logo** to open the Logo page. If you do not see this option, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. In the Logo file field, type the file path for the logo, or click **Browse** and navigate to the file on your system.

   Important: Logo size is 70 x 44 pixels and it must be in .jpg or .gif format to upload correctly.

3. Click **Upload** and **Apply**.
4. To see the new logo in your store, click **View Store.**
5. Click **Close** to save your settings and return to the WebSphere Commerce Accelerator home page.

11.2.5 Store: Change Style

Using the Change Style wizard in the WebSphere Commerce Accelerator, you can change the style of your store, including layout, color, and banner:

1. From the Store menu, select **Change Style**. The Style page displays. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select a layout and click **Apply**.
3. To view the new layout in your store, click **View Store**. Your store opens displaying the new layout.
4. When you have decided on a layout, click **Next**. The Color page displays.
5. Select a color scheme and click **Apply**.
6. To view the new color scheme in your store, click **View Store**. Your store opens displaying the new colors.
7. Click **Next**. The Banner page opens. You can select from several available banners or upload your own.
   - To upload your own banner:
     - Select **Use your own banner**.
     - In the Banner image field, type the file path for the banner, or click **Browse** and navigate to the file on your system.
     - Click **Upload**.
   - Click **Select a banner**. The available banners display for your choosing.
8. Click **Apply**.
9. To view the new banner in your store, click **View Store**. Your store opens displaying the new banner. To view the other available banners in your store, return to the Banner page, select another banner, and repeat.
10. Click **Finish**.
11. To see the changes in the store, launch the store's home page.

11.2.6 Store: Manage Files

Use the Manage Files page to upload new catalog files for your store or to reorganize (including renaming or moving) existing files.

Note: To upload new files or reorganize existing ones, first select the folder to which you want to upload or move the file, then upload the file. The folders are displayed on the Manage Files page in a tree structure.

1. From the Store menu, select **Manage Files**. The Manage Files page opens.
2. To manage files in your store, including adding new files:
   a. From the tree structure, select the destination folder for the new file.
   b. In the **Upload** field, type the file path for the file, or click **Browse** and navigate to the file on your system.
   c. Click **Upload**.
3. To move, rename, or delete files or folders:
   a. From the tree structure, right-click the folder or image that you want to move, rename or delete.
   b. From the context menu, select the corresponding action.
   c. Click **Close** to save your settings and return to the WebSphere Commerce Accelerator home page.
4. To upload new HTML or image files to your store, first select the folder to which you want to upload the file.
   d. Click **Upload**.
   e. Click **Close** to save your settings and return to the WebSphere Commerce Accelerator home page.

11.2.7 Store: Change Flow

This section describes how to enable or disable optional store features by using the Change flow feature in the WebSphere Commerce Accelerator. When a consumer direct or B2B direct store is published, many store features are enabled. For example, there is a field on the store's Registration page that asks customers to provide their gender. You may not want this field to be displayed in your store, so you can remove it easily by using the Change flow page. The aspects of your store that you can configure by using Change flow are as follows:

- Registration
  - Enable the selection of preferred currency
  - Enable the selection of preferred language

- Collect age information
  - Collect gender information
  - Enable the customer e-mail option
  - Enable the customer Remember Me option
- Catalog
  - Include search in the store
  - Include quantity selection
  - Enable category selection list
- Orders
  - Enable shopping total
  - Enable Quick order
  - Include wish list
- Checkout
  - Enable quick checkout
  - Allow customers to enter either single or multiple shipping addresses
  - Allow customers to select single or multiple shipping methods per order
  - Enable the entry of a promotional code
- Order status
  - Allow customers to track order status
  - Show shipment tracking URL

Attention: Before you begin, you may want to back up the store's JSP files. The JSP files are located in this directory:

was_installdir/installedApps/WC_*wc_instance_name*.ear/wcstores.war/*store_directory*

To configure the options for your Extended Site:

1. From the Store menu, select **Change Flow**.
2. From the pane's navigation frame, select the feature you want to configure.
3. Select the appropriate check boxes or radio buttons for the changes you wish to make.
4. Select **Apply** to apply the changes.
5. Click **Launch Store** to view the changes in your store.

   Tip: If you do not see the changes, refresh your browser.

6. Click **OK** to return to the Accelerator home page.

11.2.8 Store: Change Shipping

This section describes how to use the WebSphere Commerce Accelerator to add shipping charges to orders. Using the Accelerator, you can create shipping charges based on the weight of the order or the number of items in the order, or use fixed-rate charges. You can apply any combination of the three types of charges to an order.

Shipping charges are based on the following factors:

- Jurisdiction to which you are shipping the order.

  Jurisdictions are geographical regions or zones representing a country, region, province, territory, or zip code range, to which you sell goods.

- Shipping mode you are using to ship the order.

  A shipping mode is the combination of the shipping carrier (the company that provides shipping services) and the shipping service offered by that carrier. For example, "XYZ Courier, Overnight service" is a shipping mode.

- Shipping code used to calculate the shipping charge.

  A shipping code indicates which shipping charges are applied to which products in the order. Shipping codes are assigned to products or categories. When a customer purchases a product, the codes assigned to it determine the shipping charges that are added to the order.

Before you set up shipping charges using the Shipping notebook in the WebSphere Commerce Accelerator you should have the following company-specific data available:

- Country or region in which the store is located
- The names of all countries or regions to which the store provides shipping
- The names of all supported shipping providers
- The names of all shipping services offered by each shipping provider, such as Overnight, 3-day, or 7-day.

Defining jurisdictions

1. In the Store menu, click **Change Shipping** for the Shipping overview page.
2. Click **Shipping Jurisdictions**. The Jurisdictions page opens.
3. To define a jurisdiction, click **New**. The New Jurisdiction page displays.
4. In the **Name** field, type a name for the jurisdiction.
5. Define *at least one* of the following fields:
   - Use the Country/Region pull-down list to select a country or region.

- If the shipping rate applies to a specific state or province, type the name of the state or province in the State/Province field. If the shipping rate applies to the entire country or region (or if the country or region does not have states or provinces), leave this field blank.
- In the City field, type the name of the city.
- For ZIP code range, type the first and last ZIP codes in the range in the Start field and End field, respectively.

6. Click **OK** to save your settings and return to the Jurisdictions page. Click **OK** to the confirmation dialog. The new jurisdiction now displays in the list.
7. Repeat steps 3 through 6 to define another jurisdiction.

Defining shipping modes

1. From the Store menu, select **Change Shipping**. The Shipping overview page displays.
2. Click **Shipping modes**. The Shipping Modes page displays.
3. To define a shipping mode, click **New**. The Create New Shipping Mode page displays.
4. To define a new carrier, select **Create new**. Type the name of the new carrier in the Name field, for example `XYZ Carrier`.
5. To define a new service, select **Create New**, then type the name of the service in the Name field, for example `Overnight`.
6. Define the following optional attributes as necessary:
   - Description: Type a short phrase that describes the shipping mode, such as `XYZ Carrier, Overnight shipping mode`.
   - Additional description: Add more information about the shipping mode, such as `$15.00 for Overnight shipping`.
   - Estimated delivery time description: Type a phrase that describes the delivery time, such as `2-3 days` or `24 hours`.
   - Carrier tracking URL: Type the Web address that customers can use to obtain more information about the status of their shipment, such as `http://www.xyzcarrier.com`.
7. Click **OK** to save your settings and return to the Shipping Modes page. A confirmation dialog displays.
8. Click **OK**. The new shipping mode now displays in the list.
9. Repeat steps 2 through 7 to define another shipping mode.

Defining shipping codes

1. From the Store menu, click **Change Shipping → Shipping codes**. The Shipping Codes page displays.
2. To define a new shipping code, click **New**. The Define Shipping Code Details page displays.
3. In the Name field, type the name of the shipping code. In the Description field, type a description of the new shipping code.
4. Click **Next**. The Assign Shipping Codes to Products or Categories page opens.
5. Select the products or categories to be associated with this shipping code:
   - All products: All products in the catalog will be associated with this code.
   - Specific product(s): Either find the products or browse the catalog to select specific products to be associated with this code.
   - Categories: Click **List** to open the Category List page. Select the category you want to associate with the shipping code, and click **Add**. The category displays in the Category field on the Assign Shipping Codes to Products or Categories page.
6. Click **Finish** to save your settings and return to the Shipping Codes page.
7. A confirmation dialog opens. Click **OK**. The list shows the new shipping code.
8. A second dialog box opens, informing you that you must create shipping charges associated with this shipping code. Click **OK**.

For additional shipping codes repeat step 3 through step 7.

Defining shipping charges

After you have created the shipping codes in the previous steps:

1. From the Store menu select **Change Shipping → Shipping codes**. The Shipping Codes page opens.
2. Select the shipping code to which the shipping charge will apply.
3. Click **Charges**.
4. The Shipping Charges page displays the codes you have defined. To define a shipping charge, click **New**.
5. The Define Charge Details page opens.
   - Fill in the name of the shipping charge (`2 Day Air`).
   - In the Description field, type a description of the new shipping charge.
   - Select the time period that the products or categories will be associated with this shipping code.

6. Click **Next**.
7. The Define Charge Type page opens with three charge types.
8. Choose By quantity, By weight, or Fixed:

   By quantity: Charges are based on the number of items shipped.

   – From the Currency pull-down list, select the currency for the charge.

   – In the Ranges table:

     • To add a range, click **Add**. In the Start of range field, type the number that starts the range.

     • To add another range, repeat the previous step. If you enter a second range, the end number of the first range is entered automatically. For example, if your first range is 0 to 5, your second range starts with 6.

     • In the Charge column, type the amount to be charged for that range. For example, the amount to ship an order that contains 0 to 5 items might be $5.00. Note that this amount is in the currency you selected from the pull-down list. If you want to define amounts in one or more additional currencies, select them the Currency list.

   By weight: Charges are based on the weight of the order shipped.

   – From the Unit of measure pull-down list, select a weight unit.

   – From the Currency pull-down list, select the currency for the charge.

   – In the Ranges table:

     • To add a range, click **Add**. In the Start of range field, type the number that starts the range.

     • To add another range, repeat the previous step. If you enter a second range, the end number of the first range is entered automatically. For example, if the second range begins with 6, the first range ends with 5.

     • In the Charge column, type the amount to be charged for that range. Note that this amount is in the currency you selected from the pull-down list. If you want to define amounts in a second currency, select a new currency from the Currency list.

   Fixed: Charges that are independent of quantity or weight.

     • From the Currency pull-down list, select the currency for the charge.

     • In the Amount field, type the amount of the fixed charge in the currency you just selected. To define amounts in one or more additional currencies, select them from the Currency list.

   f. Click **Finish** to save your settings and return to the Shipping Charges page. The new shipping charge has been added to the list.

Activating shipping codes

1. From the Store menu, click **Change Shipping** → **Shipping codes**. The Shipping Codes page displays.
2. Select the shipping code to be activated. Click **Activate**. The value in the Status column changes to Activated.

Update registry components

To reflect changes to shipping on the site, the registry components must be updated. This is performed by the site administrator using the Site Administration Console:

1. Open a browser and enter this address to open the Administration Console:

   `http://`*`host_name`*`:8002/adminconsole`

2. Enter an ID and password with site administrator authority.
3. Click **Log on**.
4. Select **Site** on the Administration Console Site/Store Selection page.
5. From the Configuration menu, choose **Registry** to display a list of registry components for the site.
6. Click **Update All** to update all of the listed Registry components. The Registry window reloads, listing the status for all components as Updating.
7. Click **Refresh** to reload the Registry window and check on the status of components that you are updating. When updating is complete, the status column reads Updated.

11.2.9 Store: Change Tax

This section describes how to use the WebSphere Commerce Accelerator to add taxes to orders. A functional store must include data on taxes. Taxation is about charging and collecting taxes on the goods and services of the store. The combination of tax categories, calculation codes, jurisdiction, and jurisdiction groups create the tax charges for the store.

Specify tax settings for your store using the Tax notebook. This notebook enables you to set up or change tax information so that taxes are displayed on each order. Before you specify tax rates for your store, ensure that you contact your taxation agency to determine the types and rates you should charge.

Note: If the tax implementation supported by the Tax notebook is not appropriate for the store, WebSphere Commerce supports integrating with a third-party tax system. WebSphere Commerce also supports customizing the tax implementation. For information about customizing the tax implementation refer to the Taxes topic in the WebSphere Commerce Studio development environment online help.

Use the Tax notebook to specify the following tax information:

- Tax jurisdictions: The tax jurisdictions to which you deliver orders. The jurisdictions are geographical regions, made up of a country or region and state or province combination. For example, CANADA, Ontario is a jurisdiction. WebSphere Commerce creates a default tax jurisdiction, WORLD, for every store. The WORLD jurisdiction cannot be deleted.
- Tax categories: The tax categories for your store. Create a category for each type of tax you must collect for your store. For example, create a GST category for the GST, or a State category for the state tax. You can create as many categories as necessary for your store. In the Tax notebook, sales tax categories are applied to the total price of the order, while shipping tax is applied to the total shipping charge for the order. The Tax notebook does not apply taxes on top of other taxes.
- Display name of the tax category: The tax category name that displays to your customers. If your store displays in multiple languages, you can define a display name for each language. For example, the name of the tax category may be translated into Japanese or German, or any language in your store.
- Tax rates: The tax rates (as percentage values) charged to customers. Each rate is associated with a tax jurisdiction and tax category. For example, you can specify a 10% shipping tax for all orders shipped to Canada and a 12% shipping tax for orders shipped outside of Canada.
- Tax calculation codes: The sales and shipping tax calculation codes that specify how sales and shipping taxes are calculated. For example, all sales taxes applicable to groceries could be grouped under a single sales tax code called groceries. A store typically only supports a single tax code scheme. WebSphere Commerce creates a default code that applies to any product that is not assigned to a tax code. After creating tax codes for your store, you assign the applicable tax categories to each code.

Setting up taxes

1. Open the Tax notebook by selecting **Change Tax** from the Store menu.
2. Change tax jurisdictions:
   a. From the pane's navigation frame, click **Jurisdictions**.

b. To add a jurisdiction, select a country or region from the Country/Region pull-down list, and use the State/Province pull-down list or field as follows:

   - If you selected Canada, United States, or Japan as your country or region, either select a state or province for the chosen country or region from the pull-down list, or if one tax rate applies to the entire country or region, from the bottom of the list, select **All**.
   - If you selected a country or region other than Canada, United States, or Japan, either type the name of the state or province for the chosen country or region, or leave the field blank if the tax rate applies to the entire country or region or if the country or region does not have states or provinces.

c. Click **Add** to add the combination of country or region and state to the Defined jurisdictions list.

d. Repeat step b and step c to add more tax jurisdictions.

   Note: You can create an unlimited number of tax jurisdictions, but with more than 50 jurisdictions, the Rates page will take a long time to open.

e. Click **OK** to save your settings and exit.

3. Change sales tax codes:

   a. From the Store menu, click **Change Tax**.

   b. From the left navigation frame, click **Sales Tax**.

   c. To add a code:

      i. In the New sales tax code field, type the name of the sales tax code.

      ii. Click **Add**. The tax category appears in the Defined sales tax codes list.

   d. Set the default tax code:

      From the Define sales tax codes list, select the code, then click **Set as Default**. The default sales tax code is applied to all products that are not currently assigned to a sales tax code.

   e. To delete a code, select it in the Defined sales tax codes list and click **Remove**.

   f. Click **OK** to save your settings and exit.

4. Change the shipping tax codes:

   a. From the Store menu, click **Change Tax.**

   b. From the left navigation frame, click **Shipping Tax**.

c. To add a code:

   i. In the New shipping tax code field, type the name of the shipping tax code.

   ii. Click **Add** to display the tax category in the Defined shipping tax codes list.

d. To set a default shipping tax code, select a tax code from the Defined shipping tax codes list; then click **Set as Default**. Default shipping tax codes will be assigned to all products that are not currently assigned to a tax code.

e. To delete a code, select the code in the Defined shipping tax codes list and click **Remove**.

f. Click **OK** to save your settings and exit.

5. Change the tax categories:

   a. From the Store menu, click **Change Tax**.

   b. From the left navigation frame, click **Categories**.

   c. To add a category:

      i. In the New tax category field, type the name of the tax category.

      ii. Select the tax type of the category. Each category must be either a sales tax or a shipping tax type. Sales tax is charged on the total amount of the order. Shipping tax is charged on the shipping charges for the total order.

      iii. Select **Include tax as display price** if you want to include the tax amount in the price that displays for the product. If you do not select this option, the tax amount displays separately.

      Important: To display the tax as a display price on your store page, your site administrator or store developer will have to make some changes to the store page. For more information, see "Displaying tax as part of the display price" in the WebSphere Commerce development environment online help.

      4) Click **Add**. The tax category displays in the Defined tax categories list.

      5) Repeat step 4 on page 343 to add more tax categories.

   d. To delete a category, select the category, then click **Remove**.

   e. Click **OK** to save your settings and exit.

6. Change the tax category display name:

   a. From the Store menu, click **Change Tax.**

b. From the left navigation frame, click **Display Name**.

c. From the Language pull-down list, select the language.

d. In the Display Name fields, type the name for the tax category that opens to the customers, in the language you selected in step 4 on page 343.

e. Repeat steps b and c for each language your store supports.

f. Click **OK** to save your settings and exit.

7. Change tax rates:

   a. From the Store menu, click **Change Tax**.

   b. From the left navigation frame, click **Rates**.

   c. The tax rates table contains a default tax, Shipping, which has an initial value of 0.00. In the Shipping column, type the tax rate charged for shipping for each jurisdiction within the table. Leave the value as zero if you do not charge a shipping tax.

   d. In the rest of the cells, type the tax rate for each combination of tax jurisdiction and tax category. Specify the rate as a percentage value.

   e. Click **OK** to save your settings and exit.

8. Assign categories to codes:

   a. From the Store menu, click **Change Tax**.

   b. From the left navigation frame, click **Category Assignment**.

   Note: The table contains a default tax code, GST, and a default tax.

   c. Shipping. Assign tax categories to the appropriate tax codes by selecting the corresponding check box.

   d. Click **OK** to save your settings and exit.

9. Update registry components:

   In order for changes to tax to be reflected in the site, the registry components must be updated. This is performed by the site administrator using the Site Administration Console:

   a. Open a browser an enter this address to open the Administration Console:

      `https://`*`host_name`*`:8002/adminconsole`

   b. Click **Log on**.

   c. Enter a user ID and password for an account with site administrator authority.

   d. Click **Log on**.

e. Select **Site** on the Administration Console Site/Store Selection page.

f. From the Configuration menu, click **Registry**. This displays a list of registry components for the site.

g. Click **Update All** to update all of the listed Registry components. As the Registry window reloads, the status for all components is listed as Updating.

h. Click **Refresh** to reload the Registry window and check on the status of components you are updating. When updating is complete, the status column reads Updated.

11.2.10 Store: Payment Settings

This table displays the cassettes the merchant is authorized to use.

1. From the Store menu, select **Payment Settings**.
2. Click the green icon under OfflineCard.
   - Click **Merchant Cassette Settings** to start or stop the available merchant cassettes.
   - Click **Accounts** to create, update, or delete accounts.
3. Use the Back arrow to return to Merchant Settings.

   For more information, see 9.2.14, "Payments: Merchant settings" on page 225.

11.2.11 Store: Message Type Configuration

Use these instructions to configure the message types for your store. You cannot add new message types to the system or delete existing ones; instead, a predefined set of message types using the e-mail transport can be configured.

Note: You must have a mail server set up and configured. If not, contact the site administrator.

Open this page by selecting **Store** → **Message Type Configuration**. The following actions are initiated from the Message Type listing.

- Notifying the merchant of an order

  To configure e-mail messaging to notify the merchant of a new order:

  On the Message Type Configuration page, select **Message for notifying the merchant of an order** and click **Configure** to display the Configuration Parameters page.

Fill in the fields as follows:

Recipient	Type the e-mail address of the merchant store that is to receive the new orders.
Sender	Must be a valid e-mail address.
Subject	Type `New merchant order`.
Reply To	Must be a valid e-mail address.

Click **Finish** to save.

Note: You must fill in the required e-mail addresses with valid addresses that actually exist. Failure to supply working e-mail addresses will cause the messages to fail.

- Daily new orders summary report

  On the Message Type Configuration page, select **Message for daily new orders summary report** and click **Configure**.

Recipient	Fill in a valid e-mail address of the merchant store that is to receive the new orders.
Sender	Must be a valid e-mail address.
Subject	Type `Daily new orders summary report`
Reply To	Must be a valid e-mail address.

  Click **Finish** to save.

- Monthly store front usage report

  On the Message Type Configuration page, select **Message for monthly store front usage report** and click **Configure**.

Recipient	Fill in a valid e-mail address for the merchant store that is to receive the new orders.
Sender	Must be a valid e-mail address.
Subject	Type `Monthly store front usage report`
Reply To	Must be a valid e-mail.

  Click **Finish** to save.

- Store commerce reports

  On the Message Type Configuration page, select **Message for store commerce reports** and click **Configure**.

Recipient	Fill in a valid e-mail address for the merchant store that is to receive the new orders.

Sender	Must be a valid e-mail address.
Subject	Type `Store commerce reports`
Reply To	Must be a valid e-mail.

Click **Finish** to save.

11.2.12 Store: Report Delivery Settings

These settings are for the delivery of site or store commerce reports by e-mail and to select the frequency and format for receiving them:

1. From the Store menu, select **Report Delivery Settings** to open the Report Delivery Settings window. Make these selections:
   - Frequency: Select whether you want to receive reports on a monthly or quarterly basis.

     Monthly reports are sent out at the end of the month. Quarterly reports are sent out by the fiscal quarter, beginning on the dates you select.
   - Format: Select whether you want to receive reports in formatted text or separated by commas.

     Comma-separated data can be easily extracted and exported to many spreadsheet and database programs for further analysis.
2. Click **OK**. A message box opens stating: `The report delivery settings are saved successfully.` Click **OK** to close it.

11.2.13 Store: Fulfillment Centers

Fulfillment centers are used by stores as both inventory warehouses and shipping and receiving centers. One store may have one or many fulfillment centers associated with it.

To add a new fulfillment center:

1. From the Store menu, select **Fulfillment Centers**.
2. This opens the Fulfillment Centers page. To change or update information about a fulfillment center:
   a. Select the name of the desired center.
   b. Click **Change** to open the Change Fulfillment Center page.

> **Note:** When you create a store using the Store Creation Wizard, a fulfillment center is created with the same name as the store.

c. Update information for Name, Display name, Description, Street address, City, State/Province, Country/Region, and Zip/Postal code.

d. Click **OK** to save the changes.

3. To add an additional, new fulfillment center:

   a. Click **New** on the Fulfillment Center page to open the Change Fulfillment Center page.

   b. Fill in information for Name, Display name, Description, Street address, City, State/Province, Country/Region, and Zip/Postal code.

   c. Click **OK** to save.

   d. Click **Logout**.

11.2.14 Store: Return Reasons

This option enables you to maintain a list of return reasons for each store. You must define at least one return reason before you can accept any returns.

Add a return reason

To add a return reason:

1. From the WebSphere Commerce Accelerator menu, select **Store → Return Reasons**. The Return Reasons list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Click **New**. The New Return Reason dialog opens.
3. Enter a unique name for the return reason.
4. Enter the return reason (up to 254 characters).
5. Select the type of return reason:
   - Both
   - Customer
   - Seller
6. Click **OK**.
7. Click **OK**.

Change a return reason

To change a return reason:

1. From the WebSphere Commerce Accelerator menu, select **Store → Return Reasons**. The Return Reasons list is displayed. If you do not see this menu,

then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.

2. Select a return reason from the list and click **Change**. The Return Reason dialog opens.
3. Change the name or the reason.
4. Click **OK**.
5. Click **OK**.

Delete a return reason

To delete a return reason:

1. From the WebSphere Commerce Accelerator menu, select **Store** → **Return Reasons**. The Return Reasons list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select a return reason from the list and click **Delete**.
3. Click **OK**.

11.2.15 Store: Inventory Adjustment Code

This option enables you to maintain a list of inventory adjustment codes. The default codes supplied are:

DMGD	Damaged
EXPD	Expired
LOST	Lost
MSCT	Miscount
RTND	Returned

Add a new inventory adjustment code

To add an inventory adjustment code:

1. From the WebSphere Commerce Accelerator menu, select **Store** → **Inventory Adjustment Code**. The Inventory Adjustment Code list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Click **New**. The New Inventory Adjustment Code dialog opens.
3. Enter a unique name for the inventory adjustment code.
4. Enter the description (up to 254 characters).
5. Click **OK**.
6. Click **OK**.

Change an inventory adjustment code

To change an inventory adjustment code:

1. From the WebSphere Commerce Accelerator menu, select **Store** → **Inventory Adjustment Code**. The Inventory Adjustment Code list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select an inventory adjustment code from the list and click **Change**. The Inventory Adjustment Code dialog opens.
3. Change the name or the description.
4. Click **OK**.
5. Click **OK**.

Delete an inventory adjustment code

To delete an inventory adjustment code:

1. From the WebSphere Commerce Accelerator menu, select **Store** → **Inventory Adjustment Code**. The Inventory Adjustment Code list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select an inventory adjustment code from the list and click **Delete**.
3. Click **OK**.

11.3 Marketing menu

The options within this menu are the same as those for the Consumer Direct Storefront Asset Store. The only difference is that here, they only affect a single customer-facing store. When operating on the Consumer Direct Storefront Asset Store, any marketing changes affect all customer facing stores that were created using that asset store.

11.3.1 Marketing: Customer Segments

This was discussed in 10.4.2, “Marketing: Customer Segments” on page 312.

11.3.2 Marketing: Campaigns

This topic was discussed in 10.4.3, “Marketing: Campaigns” on page 315.

11.3.3 Marketing: Campaign Activities

This topic was discussed in 10.4.4, "Marketing: Campaign Activities" on page 316.

11.3.4 Marketing: Promotions

This topic was discussed in 10.4.5, "Marketing: Promotions" on page 318.

11.3.5 Marketing: E-Marketing Spots

This topic was discussed in 10.4.6, "Marketing: e-Marketing Spots" on page 318.

11.3.6 Marketing: Ad Copy

This topic was discussed in 10.4.7, "Marketing: Ad Copy" on page 319.

11.3.7 Marketing: Experiments

This topic is outside the scope of this redbook.

11.4 Merchandise menu

The options within this menu are the same as those for the Extended Sites Catalog Asset Store. When an Extended Site or customer facing store is being managed from this menu, you have the ability to manage catalogs for this particular store. You cannot update anything in the shared catalog. To update the shared catalog, you must have selected the Extended Sites Catalog Asset Store when accessing the WebSphere Commerce Accelerator.

11.4.1 Merchandise: Catalog Management

The Catalog Management tool was described in 10.3.1, "Products: Catalog Management" on page 280. The difference here is that you can add new categories and products to master catalog but you cannot change any items that were not created within the customer-facing store. If you attempt to modify of delete a category or product that is part of the shared catalog, you will be given an error message.

The reports feature on the Catalog Management page does not work when you are managing the catalog asset store because a required selection criteria for each report is a fulfillment center. The catalog asset store does not have any fulfillment centers because it does not track inventory. To produce product

reports, you must be managing a customer-facing store that has at least one fulfillment center.

Product Reports

Several reports are available from the Catalog Management tool:

- Inventory Receipts by Product

  This report lists all receipts: receipts received through expected inventory records, ad hoc receipts, and receipts added as a result of product disposition.

- Inventory Status

  This report depicts the current inventory allocation and receipt status of products in stock.

- Products on Backorder

  This report depicts cumulative backorder information by product. It only shows products whose expected ship date is prior to the current date.

- Outstanding Returns

  This report depicts returns that have been recorded, but for which none of the products have been received from the customer. This report does not depict returns that have been logged where some of the products have been received from the customer; these returns can be found in the Returns with Partial Receipts report.

To produce the product reports:

1. From the Catalog Management page, select a category from the tree. To produce a report for the entire master catalog, select the top node of the tree (for example, Extended Sites Catalog Asset Store).
2. Click **Reports**. The reports selection page is displayed.
3. Select one of the reports by clicking on the report name. The reporting criteria page is displayed.
4. Complete the fields as required and click **OK**. You must select at least one fulfillment center. The report is displayed.
5. Click Print to print a hardcopy of the report.
6. Click **OK** to return to the reporting criteria page.

11.4.2 Merchandise: Find Catalog Entries

This function was described in 10.3.2, "Products: Find Catalog Entries" on page 290. There is no difference in functionality under an Extended Site from that under the Catalog Asset Store.

11.4.3 Merchandise: Find Categories

This function was described in 10.3.3, "Products: Find Categories" on page 291. There is no difference in functionality under an Extended Site from that under the Catalog Asset Store.

11.4.4 Merchandise: Find Bundles or Kits

This function was described in 10.3.4, "Products: Find Bundles or Kits" on page 292. There is no difference in functionality under an Extended Site from that under the Catalog Asset Store.

11.4.5 Merchandise: Find Merchandising Associations

This function was described in 10.3.5, "Products: Find Merchandising Associations" on page 294. There is no difference in functionality under an Extended Site from that under the Catalog Asset Store.

11.4.6 Merchandise: Sales Catalogs

You can create sales catalogs at the Catalog Asset store for individual stores or that can be shared across all stores.

Attention: The Sales Catalog Tool looks at the master catalog but does not recognize catalog filters, so a sales catalog that was created for a store could contain products that were excluded from the master catalog.

For more information about how the Sales Catalog Tool works, see 10.3.6, "Products: Sales Catalogs" on page 295.

11.4.7 Merchandise: Catalog Filter

The Catalog Filter tool enables you to select items from a shared catalog for sale in Extended Sites. The tool can be accessed from the Extended Sites Hub (see "Filter Catalog" on page 269) or from an Extended Sites store. However, when it is accessed from the hub, you cannot set prices. This must be done at the individual store level.

To access the Catalog Filter Tool:

1. From the WebSphere Commerce Accelerator menu, select **Store** → **Catalog Filter**. The Catalog Filter Tool is displayed. If you do not see this page, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.

The initial page provides a list of top-level categories from the shared catalog. Click the plus box to expand a category or a minus box to collapse it.

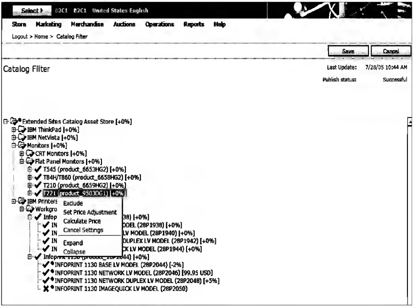


Figure 11-1 Catalog Filter tool

You can exclude categories and products. You can also set prices for a particular product or an entire category. The categories and products that are included will have a check next to the name. Those that are excluded will have an X next to the name. To make changes to the catalog, click the name of a category or product in the tree. A menu is displayed as depicted in Figure 11-1.

Exclude a product or category

To exclude a product or entire category in the shared catalog from being displayed to customers of the Extended Site store:

1. Click the name of the product or category in the tree.

2. Click **Exclude.**

   The check on the left of the name will change to an X.

3. To include an excluded product or category, click the name.
4. Click **Cancel settings**.
5. Click **Save** when you have made all the changes that are needed. This will save and publish the catalog.

Set prices

You can set prices for individual products or for all products in a category. To set prices:

1. Click the name of the product or category in the tree.
2. Click **Set price adjustment**.

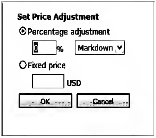


Figure 11-2 Set price adjustment

3. To set a percentage adjustment:
   a. Click **Percentage adjustment**.
   b. Enter a percent value (such as 5 or 15).
   c. Select either Markdown or Markup from the list box.
   d. Click **OK**.
4. To set a fixed price:
   a. Click **Fixed price**.
   b. Enter a fixed price value.
   c. Click **OK**.
5. Click **Save** when you have made all the changes that are needed. This saves and publishes the catalog.

11.4.8 Merchandise: Catalog Import

This function was described in 10.3.7, "Products: Catalog Import" on page 296. The functionality is the same whether you are working with a shared catalog in the Catalog Asset Store or a catalog for an Extended Sites store.

When you import products into the shared catalog, all stores have access to those products. When you import products into an Extended Sites store, only that store has access to those products.

11.4.9 Merchandise: Expected Inventory

Expected inventory is received from a vendor and typically is paid for with a purchase order. WebSphere Commerce tracks expected inventory with expected inventory records, and it enables you to record an external identifier, usually a purchase order number from an external system. In this way, you can easily keep track of the inventory you have ordered, as well as what has and has not arrived. Expected inventory details are the specifics about products in an expected inventory record, such as the fulfillment center expecting the product, the expected receipt date, quantity expected, and comments.

An expected inventory record cannot be deleted after inventory has been received against it, and expected inventory details cannot be changed or deleted after any of that inventory has been received.

When orders are placed for inventory that is available in a fulfillment center, the Order Management subsystem allocates inventory to those orders. Allocating inventory to an order makes it unavailable to the order management system. If the order is canceled, the inventory becomes available again.

If an order is placed for inventory that is not available, a backorder can be created. If there is expected inventory that could be used to fulfill the backorder, then the expected inventory is allocated to the backorder and the customer can be given an expected ship date.

Before inventory for a product can be received, the product must be defined in the WebSphere Commerce system, regardless of whether the inventory receipt is expected or ad hoc.

Note: Vendors must be created before the store can create any expected inventory records.

The available functions from this page are detailed in the following sections.

Create an expected inventory record

To add a new expected inventory record:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise** → **Expected Inventory**. The Expected Inventory list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Click **New**. The New Expected Inventory Record wizard launches, displaying the General page first.
3. Provide appropriate information for the fields and click **Next** to proceed to the next page. Click **Previous** to return to the previous page, if necessary.
4. On the Details page, click **Add**. The Find Products dialog opens.
5. Search for the product you want to add to the expected inventory record by providing full or partial information in either or both of the Name and SKU fields. Click **Find**. The Find Products dialog searches CATENTDESC.NAME for Name queries, and ITEMSPC.PARTNUMBER for SKU queries, and displays the inventory matching your search criteria on the Products - Search Results list.
6. Select the check box next to the product you want to add to the expected inventory record, and click **OK**. The Add Expected Inventory Details dialog opens with the selected product listed.
7. Provide appropriate information for the fields and click **OK**. The Details page is displayed again, with the new detail added.
8. Click **Add** to add more products, or select a check box next to a product in the list and click **Change** to change it or **Remove** to remove it.
9. When you have finished adding, changing, and removing products and completed all pages in the wizard, click **Finish** on the Details page to create the expected inventory record.

Change an expected inventory record

To change an expected inventory record:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise** → **Expected Inventory**. The Expected Inventory list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Do one of the following:
   a. Select the check box next to the expected inventory record that you want to work with, and click **Change**.
   b. From the Vendor column, click the name of the vendor of the expected inventory.

3. The Change Expected Inventory notebook launches, displaying the General page first.
4. Update the fields as required and use the links on the left side to switch between pages.
5. On the Details page, select the check box next to the product you want to view or change, and click **Change**. The Change Expected Inventory Details dialog opens.
6. View or update the fields as required and click **OK** to save the changes and close the notebook.

Note: Due to space constraints, the expected receipt date and comments are not displayed on the Expected Inventory Details list. To view this information, follow the steps above to open the Change Expected Inventory Details dialog.

Show the details of an expected inventory record

To show the details of an expected inventory record:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise → Expected Inventory**. The Expected Inventory list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select the check box next to the expected inventory record you want to work with, and click **Details**. The Expected Inventory Details list is displayed.

Close an expected inventory record

To close an expected inventory record:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise → Expected Inventory**. The Expected Inventory list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select the check boxes to the left of the expected inventory records that you want to close, and click **Close**.
3. A message is displayed, prompting you to confirm that you want to close the expected inventory records. Click **OK** to close them.

   The Expected Inventory list refreshes, removing the closed expected inventory records.

Important: After you close an expected inventory record, you cannot re-open it. Be sure you have received all of the inventory associated with the expected inventory record before you close it.

Delete an expected inventory record

To delete an expected inventory record:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise → Expected Inventory**. The Expected Inventory list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select the check box next to the expected inventory record that you want to delete, and click **Delete**.
3. A message is displayed, prompting you to confirm that you want to delete the expected inventory record. Click **OK** to delete it.

   The Expected Inventory list refreshes, removing the deleted expected inventory record. You can delete only one expected inventory record at a time.

Important: The expected inventory record is marked for deletion from the database when you click OK. To completely delete the expected inventory record, the Site Administrator must run the Database Cleanup utility.

Display expected inventory reports

To display the expected inventory reports:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise → Expected Inventory**. The Expected Inventory list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Click **Reports**. The Expected Inventory Reports list is displayed.
3. Select one of the following reports:
   - Open Expected Inventory Records report
   - Inventory Receipts through Expected Inventory Records report

   The selected report is displayed.

11.4.10 Merchandise: Vendors

This option enables you to maintain a list of vendors. Inventory must be assigned to a vendor so you must define at least one vendor before you can accept any inventory shipments.

Add a new vendor

To add a new vendor:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise → Vendors**. The Vendors list is displayed. If you do not see this menu, then your

logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.

2. Click **New**. The New Vendor wizard opens.
3. Enter name and address information.
   a. Name (required)
   b. Description (required)
   c. Street address
   d. City
   e. State/Province
   f. ZIP/Postal code
   g. Country/Region
4. Click **Next**.
5. Enter optional contact information and click **Finish**.
6. Click **OK**.

Change a vendor

To change vendor information:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise → Vendors**. The Vendors list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select a vendor from the list and click **Change.**
3. Change any of the existing values on the Name and Address page.
4. Click the Contact Information tab to view that page.
5. Change any values on the Contact Information page.
6. Click **OK** when complete.
7. Click **OK**.

Delete a vendor

To delete a vendor:

1. From the WebSphere Commerce Accelerator menu, select **Merchandise → Vendors**. The Vendors list is displayed. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
2. Select a vendor from the list and click **Delete.**
3. Change any of the existing values on the Name and Address page.
4. Click **OK**.

11.5 Auctions menu

WebSphere Commerce provides an auctioning component that lets you sell products to the highest bidder. This component provides an ideal environment for implementing small to moderate-scale auctioning as part of your e-commerce solution, and for conducting auctions simultaneously. In addition, auctions offer special advantages in these situations:

- When you are uncertain about the size of the market and the willingness of buyers to purchase a product; for example, when selling used or reconditioned products
- When a product's price has been set too high initially, and you want to determine a price based on market demand
- When you want to promote new product lines or liquidate inventory

WebSphere Commerce supports three types of auctions:

- Open Cry auctions: All bids are available for public viewing; each participant knows the other bids submitted.
- Sealed Bid auctions: Enable participants to submit a bid that is seen only by the auction administrator. You set a submission deadline, and no bid received after that time is accepted. The bidder does not know the other bids submitted.
- Dutch auctions: Bidders are not required to set the initial bid price. Instead, the user creating the auction announces a price and asks whether any participants will accept it. Usually the auction starts with a high bid price that is reduced over time until bidders have cleared the inventory.

11.5.1 Auctions: Auctions

To create an auction:

1. From the Auctions menu, select **Auctions**. The Auctions page displays.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

2. Click **New** to start the Auction wizard.
3. Complete each page and click **Next** until you are finished.
4. Click **Finish**. The auction is created and an acknowledgement message opens, showing the auction ID.

Here are some general tips to consider when creating auctions:

- For Dutch auctions, use the Auction wizard to create an auction. If you expect to use the same template for several auctions, consider creating an auction style first.
- If you are creating an Open Cry or Sealed Bid auction, you may want to specify bid rules when you create the auction. In such cases, you must create bid rules before you create the auction.
- In general, if you know you will be using the same style for several auctions, create an auction style first, then create an auction with the Auction wizard, using the auction style you just created.

11.5.2 Auctions: Find Auctions

Use this page to search for auctions using any of the following.

- Auction Id: Type the ID of the auction you are searching for. The Auctions page displays the located auction.
- SKU: Type the SKU of the product you are searching for. The Auctions page displays auctions matching the SKU.
- Auction Type: Select an auction type (All, Open Cry, Sealed Bid, or Dutch). The Auctions page displays auctions matching the type.

To find an auction:

1. From the Auctions menu, select **Find Auctions** to open a search page.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Specify the Auction ID or SKU, or select an Auction type.
3. Click **OK** to display a list of auctions that match the criteria you specified.

11.5.3 Auctions: Auction Styles

You may find that using auction styles saves you time when creating auctions. Auction styles are templates that automatically complete fields for you. For example, perhaps you schedule Open Cry auctions and always use non-discriminative pricing. An auction style can complete the appropriate fields for the auction type and pricing mechanism, saving you the trouble of selecting these fields for each auction.

If some auction specifications, such as the product display template and the auction rule template, do not vary between your auctions, you can create an auction style that includes these values.

The Auction Style wizard makes it easy to create new auction styles. You can use this wizard to populate any field that displays during the process of creating an auction.

1. From the Auctions menu, select **Auction Styles**.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

2. Click **New** to open the Auction Style wizard.
3. To create a style, complete each page and click **Next** until you are finished.
4. Click **Finish**. A message displays.

11.5.4 Auction: Bid Rules

Use this page to create, change, and delete bid rules.

Rule Name	The name of the bid rule.
Description	Text describing the bid rule.
Minimum value	The minimum bid amount that will be accepted.
Minimum quantity	The minimum quantity that may be bid on.
New	Creates a new style with the Bid Rule wizard when clicked.
Change	Updates an existing style with the Bid Rule notebook when clicked.
Delete	Deletes the selected bid rules when clicked.

From the **Auction** menu, select **Bid Rules** to open the Bid Rule page. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

Create bid rules

1. Click **New**. The Bid Rule wizard starts.
2. To create a bid rule, complete each page and click **Next** until you are finished.
3. Click **Finish** to save.

Change existing bid rules

1. Select a bid rule and click **Change**. The first page of the Bid Rule notebook displays.
2. Complete each page and click **Next** until you are finished.
3. Click **Finish**.

11.6 Operations menu

The Operations menu enables an administrator to:

- Find and manage customers
- Find and manage orders (including packaging, shipping, and payments)
- Manage returns
- Manage inventory
- Manage payments

11.6.1 Operations: Create New Customer

To create a new registered customer for the store:

1. From the Operations menu, select **Create New Customer**. This displays the Create New Customer - General page.
2. Enter the following customer details:
   a. Unique Logon ID. This is used by the customer to log on to the store.
   b. Password (entered twice for confirmation).
   c. Title, First name, Middle name, and Last name.
   d. A challenge question and answer used by the administrator to verify the customer's identity in the event that the customer forgets their password and requires it to be reset. The idea is to enter a question that only the customer can answer (for example, what was your first pet's name?).
   e. Select **Enable** for the Account status. If the account is not enabled, the customer will be unable to log onto the store.
   f. Selected a Preferred language and Preferred currency.
3. Click **Next** to display the Create New Customer - Address page.
4. Enter the following customer address details:
   a. Country/Region
   b. Street address
   c. City
   d. State/Province
   e. ZIP/Postal Code
5. Click **Next** to display the Create New Customer - Contact page.
6. Enter the following customer contact details:
   a. Preferred method of communication.
   b. E-mail address.

c. Phone numbers, including the type of phone number if known. Select the **Listed** check box if the phone number is publicly listed.

d. Fax number.

e. Best time to call.

f. Select the **Include promotional material with shipments** check box if the customer is willing to receive promotional material in packages they order from the store.

7. Click **Next** to display the Create New Customer - Demographics details page.
8. Enter the following customer demographic details (if available):

   a. Age

   b. Gender

   c. Marital status

   d. Annual income

   e. Number of household members

   f. Number of children

   g. Return customer, to indicate whether the customer has previously made a purchase from the store

   h. Employer

   i. Interests/Hobbies

9. Click **Finish**. This displays a pop-up window indicating that the user file has been created successfully.
10. Click **OK**.

11.6.2 Operations: Find Customer

To find a registered customer for the store:

1. From the Operations menu, select **Find Customers** to display the Find Customers page.
2. Enter any combination of the following search criteria fields:
   - Customer logon ID
   - First name
   - Last name
   - Phone number
   - E-mail address
   - City
   - ZIP/Postal Code

3. For each field, one of the following search capabilities can be selected:
   - Match case, beginning with: Criterion will match any records with the selected field that begins with the value entered (case-sensitive).
   - Match case, containing: Criterion will match any records with the selected field that contains the value entered (case-sensitive).
   - Ignore case, beginning with: Criterion will match any records with the selected field that begins with the value entered (not case-sensitive).
   - Ignore case, containing: Criterion will match any records with the selected field that contains the value entered (not case-sensitive).
   - Exact match: Criterion will match any records with the selected field that contains the value exactly as entered.
4. Enter a value in at least one search criteria field and click **Find**.

   This displays a list of all customer records that match the search criteria on the Find Customers - Search Results page.

The Find Customers - Search Results page is a typical search results page. It enables the user to:

- Scroll page-by-page through results with First, Last, Previous, and Next links.
- Go directly to a page by entering the page number and clicking **Go**.
- Select all rows in the table by selecting the check box at the top of the table.
- Select individual rows by selecting the check box next to each individual row.
- Sort the table of results on any column.

However, the Find Customers - Search Results page also enables the user to perform the following actions specific to customers:

- Reset a customer's password by selecting the check box beside the customer record and clicking **Reset Password**. For more about resetting customer passwords, refer to 11.6.4, "Operations: Reset Customer Password" on page 369.
- Create a new customer by clicking **New Customer**. This displays the Create Customer - General page. For more information about creating customers, refer to 11.6.1, "Operations: Create New Customer" on page 365.
- Change a customer's details by selecting the check box beside the customer record and clicking **Change**. This displays the Change Customer Information - General page. For more information about changing customer details, refer to 11.6.3, "Operations: Update Customer Details" on page 368.
- Find all orders for a customer by selecting the check box next to the customer record and clicking **Orders**. This performs a search for all orders belonging to the selected customer and displays the results on the Orders page. For more about finding orders, refer to 11.6.5, "Operations: Find Orders" on page 369.

- Place a guest order for a customer by selecting the check box next to the customer record and clicking **Place Order**. This displays the Place Order - Products page. For more information about placing guest orders, refer to 11.6.6, "Operations: Place Guest Order" on page 371.
- Find all returns for a customer by selecting the check box next to the customer record and clicking **Returns**. For more information about finding returns, refer to 11.6.22, "Operations: Find a Return" on page 380.
- Create a return for a customer by selecting the check box next to the customer record and clicking **New Return**. For more information about creating returns, refer to 11.6.23, "Operations: Create a Return" on page 380.

11.6.3 Operations: Update Customer Details

This section demonstrates how to update the details for a registered customer for the store.

Follow the steps as outlined in 11.6.2, "Operations: Find Customer" on page 366 to find the customer. After the customer has been located on the Find Customers - Search Results page, follow these steps:

1. Select the check box next to the customer record and click **Change** to load the Change Customer Information - General page.

   This page is the same as the Create Customer - General page except for these minor differences:

   – The customer's Logon ID and Password cannot be changed.

   – All fields are prepopulated with the existing values.

   – Instead of clicking **Next** to gain access to the Address, Contact, and Demographic details, they are available as menu options to the left of the pane. Clicking a menu option opens the appropriate details page.

   – The last update time is displayed. This is the date and time that the customer details were last modified. This field cannot be modified.

   – The last visit time is displayed. This is the date and time that the customer last visited the store. This field cannot be modified.

   – All other fields can be modified as per the Create Customer process as outlined in 11.6.1, "Operations: Create New Customer" on page 365.

2. After all modifications have been made, click **OK** to save the changes. A pop-up window opens, indicating that the customer details were updated successfully.
3. Click **OK**.

11.6.4 Operations: Reset Customer Password

This section demonstrates how to reset the password of a registered customer. Resetting a password is performed if customers forget their password or have been locked out of their account. The system automatically generates a new password and e-mails it to the customer. This can be performed only if the customer has specified a primary e-mail address in the contact details.

Follow the steps as outlined in 11.6.2, "Operations: Find Customer" on page 366 to find the customer. After the customer has been located on the Find Customers - Search Results page, follow these steps:

1. Select the check box next to the customer record and click **Reset Password**.

   This prompts the administrator to enter the new password.

2. Enter the password and click **OK**.

   A pop-up window opens, indicating that the password was reset successfully.

3. Click **OK**.

11.6.5 Operations: Find Orders

This section demonstrates how to find orders for the store:

1. From the **Operations** menu on the manage store page, select **Find Orders**. This displays the Find Orders page.
2. Enter either an exact Order number or a partial Customer logon ID (along with a search filter). Alternatively, click the Advanced Search link to refine the search further. Advanced Search includes the following fields:
   - Order Status
   - Created Start Date
   - Created End Date
   - Modified Start Date
   - Modified End Date
   - First name
   - Last name
   - Address number 1
   - ZIP/Postal code
   - E-mail address 1
3. After the search criteria have been entered, click **Find**. The results display on the Orders page.

The Orders page, a typical search results page, enables the user to:

- Scroll page-by-page through results with First, Last, Previous, and Next links.

- Go directly to a page by entering the page number and clicking **Go**.
- Select all rows in the table by selecting the check box at the top of the table.
- Select individual rows by selecting the check box next to each individual row.
- Sort the table of results on any column (other than Payment status and Order status).

The Orders page also enables the user to perform actions specific to orders:

- Place a guest order by clicking **Place Guest Order**. This displays the Place Guest Order page. For more information about placing guest orders, refer to 11.6.6, "Operations: Place Guest Order" on page 371.
- Create a new return by selecting the check box next to the order and clicking **New Return**. For more information about creating new returns, refer to 11.6.23, "Operations: Create a Return" on page 380.
- Display the summary details of an order either by selecting the order number link in the results table, or by selecting the check box next to the order and clicking **Summary**. This opens the Order Summary page, which displays all details of the order and enables the user to print the details by clicking **Print**. It also enables the user to send an e-mail notification about the order to either the customer or the administrator. For more information about sending an e-mail notification for an order, refer to 11.6.8, "Operations: Send Order E-mail Notification" on page 373.
- Change the details of an order by selecting its check box and clicking **Change** to display the Change Order - Products page. For more information about changing order details, refer to 11.6.9, "Operations: Change Order Details" on page 374.
- Add comments to an order by selecting its check box and clicking **Add Comments** to display the Add Comments page. For more information about adding comments to an order, refer to 11.6.10, "Operations: Add Order Comments" on page 374.
- Cancel an order by selecting its check box and clicking **Cancel Orders**, which displays the Cancel Orders page. For more information about cancelling orders, refer to 11.6.11, "Operations: Cancel Order" on page 375.
- Proceed with the payment of an order by selecting its check box and clicking **Proceed with Payment**, which displays the Proceed with Payment page. For more information about proceeding with payments for orders, refer to 11.6.36, "Operations: Proceed with Order Payment" on page 391.
- Process the payment for an order by selecting its check box and clicking **Process Payment** to display the Process Payment Order Search Results page. For more information about processing payments for orders, refer to 11.6.37, "Operations: Process Order Payment" on page 391.

11.6.6 Operations: Place Guest Order

This section demonstrates how to place a guest order for a registered customer. A guest order is an order submitted on behalf of a registered customer by the administrator.

1. From the Operations menu, select **Place Guest Order**. This displays the Place Guest Order - Products page.
2. Add to the order by clicking **Add** to open the Add Products - Find page.
3. Enter at least a partial Product name or SKU code and the maximum number of results to return. Click **Find**. The Products - Search Results page loads.
4. Enter the number of products in the Quantity field next to the product and click **OK**. This displays the Place Guest Order - Products page again, with the list of selected products added.
5. Products can be deleted from the list by selecting their check boxes and clicking **Remove**.
6. After the list of products and their quantities have been decided on, click **Next**. This loads the Place Guest Order - Shipping page.
7. To specify or modify the shipping address, select the product's check box and click **Select Another Address**. This loads the Select Shipping Address page.
8. Select the check box next to the desired shipping address and click **OK** to return to the Place Guest Order - Shipping screen.
9. If no shipping addresses are listed, click **New** to create one on the **Create Shipping Address** page.
10. Enter the following customer shipping details:
    - Address identifier: a brief description to identify the address

      For example, a customer may want to send a package to their work location so the Address identifier might be `Work`.
    - First name
    - Last name
    - Street address
    - City
    - State/Province
    - Country/Region
    - ZIP/Postal code
    - Phone number
    - E-mail address
11. Click **OK** to return to the Place Guest Order - Shipping page.

12.To specify or modify the shipping method, select the check box next to the product and click **Select Another Method**. This displays the Shipping Methods page.

13.Select the check box for the desired shipping method and click **OK** to return to the Place Guest Order - Shipping page.

14.Click **Next**. This displays the Place Guest Order - Product Availability page, which shows the availability of each product in the order.

15.To remove a product from the order, select its check box and click **Remove**.

16.To move a product to a new, separate order, select its check box and click **Move To Separate Order**. This creates a separate order to handle the product. The Move to Separate Order column now shows a value of `Yes`.

17.To move a product from a separate order back into the current order, select its check box and click **Keep In Current Order**. Note that the Move to Separate Order column now shows a value of No.

18.After the products for this order have been decided on, click **Next**. This displays the Place Guest Order: Adjustments page.

19.This page enables the total order price to be adjusted as follows:

- Minus order level adjustment: Enter the price amount of any additional price adjustment to be subtracted from the order. For example, to waive the shipping charges for an order, enter a value equivalent to the shipping charge. Note that the amount is an adjustment made before tax and shipping charges have been calculated.
- Shipping: Enter the total shipping charge to be added to the order.
- Coupon: Enter the ID that uniquely identifies a coupon. The value of the coupon will be subtracted from the order as a discount made before any other discounts, taxes, or shopping charges are applied.
- Click **Recalculate** to recalculate the total order amount.
- Click **Undo** to undo changes to adjustments. Note that this does not undo changes made before the Recalculate button was clicked.

20.After all adjustments have been made, click **Next**. This loads the Place Guest Order: Payment page.

21.Select the Payment method, Credit card number, and Expiry month and year.

22.Click **Next**. This loads the Place Guest Order: Billing Address page.

23.By default, the billing address is the same as the shipping address that was entered in an earlier step. If a different billing address is required, click **New**. This loads the Create Billing Address page, which works exactly the same as the Create Shipping Address page described in step 10 on page 371. Add a new address and click **OK** to return to the Billing Address screen.

24. Select the check box next to the desired billing address and click **Next**. This displays the Place Guest Order: Comments page.

25. Enter any additional comments and click **Finish** to submit the order.

11.6.7 Operations: Auctions

The Auctions page works the same as the Auctions page under Merchandise (11.5.1, "Auctions: Auctions" on page 362), except for these minor differences:

- The ability to create new auctions is not available.
- The ability to change, retract, or close existing auctions is not available.

11.6.8 Operations: Send Order E-mail Notification

This section demonstrates how to send an e-mail notification to either the customer or the administrator for an order placed with the store.

Typically after an order has been placed with the store, an e-mail notification is sent automatically to either the customer or the administrator. To resend a copy of that e-mail, first follow the steps outlined in 11.6.5, "Operations: Find Orders" on page 369 to find the order. After the order has been located on the Orders search results page, follow these steps:

1. Select the check box next to the order and click **Summary**. This displays the Order Summary page.

   Refer to the online help system for information about the displayed fields.

2. Click **E-mail order**. This displays the E-mail Order page.

3. Select the desired recipient. If the customer is selected, the Recipient e-mail address is populated automatically with the customer's e-mail address (assuming that the customer is registered). If the administrator is selected, the Send Order Notification E-mail details are populated automatically.

4. Fill in the desired e-mail recipient details and a subject and click **OK**. A window pops up to indicate that the message was sent successfully.

11.6.9 Operations: Change Order Details

This section demonstrates how to change the details for an order placed with the store.

Follow the steps that were outlined in 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 to find the desired order. After it has been located on the Releases Ready to Ship search results page, follow these steps:

1. Select the check box next to the order and click **Change**. This displays the Change Order: Products page.

   This page is the same as the Place Guest Order: Products page (11.6.6, "Operations: Place Guest Order" on page 371) except for these minor differences:

   - All fields are prepopulated with the existing values.
   - Instead of clicking **Next** to gain access to the Shipping, Product Availability, Adjustments, Payment, Billing Address, and Comment details, they are available as menu options to the left of the pane. Clicking a menu option opens the appropriate details page.
   - All other fields can be modified as per the Place Guest Order process outlined in 11.6.6, "Operations: Place Guest Order" on page 371.

2. After all of the modifications have been made, click **OK** to save the changes. A pop-up window indicates that the order details were updated successfully.

11.6.10 Operations: Add Order Comments

This section demonstrates how to add comments to an order placed with the store. Added comments can be sent to the customer via e-mail if desired.

Follow the steps in 11.6.5, "Operations: Find Orders" on page 369 to find the order. After you locate it on the Orders search results page, follow these steps:

1. Select the check box next to the order and click **Add Comments**. This displays the Add Comments page.
2. Enter the desired comment and select **Send this comment to the customer** to indicate that the comment should be sent to the customer.

   Clicking the check box automatically displays the customer's e-mail address (assuming that the customer is registered).

3. Click **OK**. A window pops up to indicate that the comment was added to the order successfully. Click **OK** to close it.

11.6.11 Operations: Cancel Order

This section demonstrates how to cancel an order placed with the store.

Follow the steps that were outlined in 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 to find the desired order. After it has been located on the Releases Ready to Ship search results page, follow these steps:

1. Select the check box next to the order and click **Cancel Orders**. This displays the Cancel Orders page.
2. Enter the reason for the order cancellation and click **Send this comment to the customer**.

   Clicking this check box automatically displays the e-mail address of the recipient, assuming that the customer is registered.
3. Click **OK**. A confirmation window pops up. Click **OK** to close it.

   The status of the order turns into Cancelled.

11.6.12 Operations: Find a Pick Batch

This section demonstrates how to find pick batches for the store.

A pick batch is a set of order releases that are grouped to create a single pick ticket (which lists all of the products to be picked from inventory) and a packing slip for each release (which lists all of the products in each package). The Pick Packer uses the pick ticket and packing slip to physically assemble the packages for shipping.

From the Operations menu, select **Pick Batches** to open the Pick Batches page. The Pick Batches page is a typical search results page. It enables the user to:

- Scroll page-by-page through results with First, Last, Previous, and Next links.
- Go directly to a page by entering the page number and clicking Go.
- Select all rows in the table by selecting the check box at the top of the table.
- Select individual rows by selecting the check box next to each individual row.

The Pick Batches page also enables the user to perform these actions that are specific to pick batches:

- Create the next pick batch by clicking **Create Next**. For more about creating pick batches, refer to 11.6.13, "Operations: Create a Pick Batch" on page 376.
- View a pick ticket by selecting the check box next to the pick batch and clicking **View Pick Ticket**. This displays the Pick Ticket page. For more information about viewing and printing pick tickets refer to 11.6.14, "Operations: Print a Pick Ticket" on page 376.

- Print and find packing slips by selecting the check box beside the pick batch and clicking **Packing Slips** to access the Packing Slips page. For more information about printing packing slips, refer to 11.6.15, "Operations: Print a Packing Slip" on page 377.
- Generate shipping exception reports by clicking **Reports**. This displays the Shipping Exceptions page. For more information about generating shipping exception reports, refer to 11.6.16, "Operations: Generate Shipping Exceptions Report" on page 377.

11.6.13 Operations: Create a Pick Batch

This section demonstrates how to create a new pick batch to process orders placed with the store.

After the payment for an order has been approved, the system automatically creates releases to fulfill the order. A release is a grouping of order line items on an order that are shipping to the same address, from the same fulfillment center, with the same carrier, at the same time. Conceptually, it groups all items on the order that conceivably could be put in the same box.

After the releases have been created for the order, the next step is to create a pick batch, a set of releases that are grouped together to create a single pick ticket (which lists all products to be picked from inventory) and a packing slip for each release (which lists all products in each package). The Pick Packer uses the pick ticket and packing slip to physically assemble the packages for shipping.

1. From the Operations menu, click **Pick Batches** to open the Pick Batches page.
2. Click **Create Next**. A window pops up to indicate success. (A pick batch will be created only if there are releases pending.) Click **OK**.

11.6.14 Operations: Print a Pick Ticket

This section demonstrates how to print a pick ticket for a pick batch in order to process orders placed with the store. A pick ticket is used by the Pick Packer to pick items from the inventory to fill orders.

Follow the steps that were outlined in 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 to find the desired pick batch. After it has been located on the Releases Ready to Ship search results page, follow these steps:

1. Select the check box next to the pick batch and click **View Pick Ticket**. This displays the Pick Ticket page.

   Refer to the online help system for information about the displayed fields.
2. Click **Print** to print the pick ticket.

11.6.15 Operations: Print a Packing Slip

This section demonstrates how to print a packing slip for a pick batch in order to process orders placed with the store. A packing slip is used by the Pick Packer to physically assemble a package.

Follow the steps that were outlined in 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 to find the desired pick batch. After it has been located on the Releases Ready to Ship search results page, follow these steps:

1. Select the check box next to the pick batch and click **Packing Slips**. This displays the Packing Slips page.
2. Select the check box next to the desired packing slip and click **View** to open the Packing Slip page. Refer to the online help system for information about the displayed fields.
3. Click **Print** to print the packing slip.

11.6.16 Operations: Generate Shipping Exceptions Report

This section demonstrates how to generate a shipping exceptions report for a pick batch. This report is used to determine which of the releases in the pick batch are missing manifest information.

Follow the steps as outlined in 11.6.12, "Operations: Find a Pick Batch" on page 375 to find the desired pick batch. After the desired pick batch has been located on the Pick Batches search results page, follow these steps:

1. Select the check box next to the pick batch and click **Reports**. This opens the Shipping Exceptions page.
2. Select a fulfillment center from the list and click **Add**.
3. To remove a fulfillment center, click **Remove**.
4. After one or more fulfillment centers have been selected, click **OK**. This loads the Shipping Exceptions report content page.

   Refer to the online help system for information about the displayed fields.
5. Click **Print** to print a copy of the report.

11.6.17 Operations: Find Releases Ready to Ship

This section demonstrates how to find releases that are ready for shipping. A release is a grouping of order line items on an order that are shipping to the same address, from the same fulfillment center, with the same carrier, at the same time. Conceptually, it groups together all items on the order that could conceivably be put in the same box.

From the Operations menu, select **Releases Ready to Ship**. This displays the Releases Ready to Ship page.

The Releases Ready to Ship page is a typical search results page. It enables the user to:

- Scroll page-by-page through results with First, Last, Previous, and Next links.
- Go directly to a page by entering the page number and clicking **Go**.
- Select all rows in the table by selecting the check box at the top of the table.
- Select individual rows by selecting the check box next to each individual row.

The Releases Ready to Ship page also enables the user to perform the following actions that are specific to releases:

- Create a package by clicking **Packages** to display the Packages page. For more information about creating packages, refer to 11.6.18, "Operations: Create Package" on page 378.
- Confirm that a release has shipped by clicking **Confirm Shipment**. For more information about confirming the shipment of releases, refer to 11.6.21, "Operations: Confirm Release Shipped" on page 379.

11.6.18 Operations: Create Package

This section demonstrates how to create a package to satisfy an order placed with the store. The package is directly associated with a release, and it represents the physical package shipped to the customer.

Follow the steps that were outlined in 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 to find the desired release. After it has been located on the Releases Ready to Ship search results page, follow these steps:

1. Select the check box next to the release and click **Packages**. This displays the Packages page.
2. Click **New**. This displays the New Package Details page.
3. Enter the following details:
   - Package ID: A unique identifier for the package
   - Tracking ID: Assigned by the shipping carrier
   - Pickup ID: Assigned by the shipping carrier
   - Shipping Provider
   - Package Weight (including unit of measurement)
   - Shipping Costs (including currency)
   - Shipping Date (including year, month, and day)
4. Click **OK**. A window pops up to indicate success.
5. Click **OK**.

11.6.19 Operations: Change Package

This section demonstrates how to change the details for a package used to satisfy an order placed with the store. The package is directly associated with a release and represents the physical package shipped to the customer.

1. Follow the steps that were outlined in 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 to find the desired release.
2. On the Releases Ready to Ship search results page, select the check box next to the release and click **Packages**. This displays the Packages page.
3. Select the check box next to the desired package and click **Change**. This displays the Change Package Details page.
4. Update the fields of the Create Package Details page as outlined in 11.6.18, "Operations: Create Package" on page 378.
5. After all modifications have been completed, click **OK**. A window pops up to indicate that the package details were updated successfully.
6. Click **OK**.

11.6.20 Operations: Delete Package

This section demonstrates how to delete a package that was used to satisfy an order placed with the store. The package is directly associated with a release, and it represents the physical package shipped to the customer.

1. Follow the steps that were outlined in 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 to find the desired release.
2. On the Releases Ready to Ship search results page, select the check box next to the release and click **Packages**. This displays the Packages page.
3. Select the check box next to the desired package and click **Delete**. A pop-up window opens for confirming the deletion of the package.
4. Click **OK** to delete the package.

11.6.21 Operations: Confirm Release Shipped

This section demonstrates how to confirm that all of the packages for a release have been physically shipped. Follow the steps in 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 to find the desired release. After it has been located on the Releases Ready to Ship search results page:

1. Select the check box next to the release and click **Confirm Shipment**. A window pops up to indicate that the release has been shipped successfully.
2. Click **OK**. The status of orders associated with that release turns to Shipped.

11.6.22 Operations: Find a Return

To find a return:

1. From the Operations menu, click **Find Returns**. A search dialog opens.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

2. Provide at least one of the following pieces of information (at least one field must be specified):

   – In the Return number field, type the return number, which uniquely identifies the return.

   – In the Order number field, type the order number that contains the product to be returned.

   – In the Originator logon ID field, type the store logon ID for the customer who originated the return. If this search dialog was launched by clicking Find Returns from the Return History list for a particular customer, the customer logon ID is populated with the customer's logon ID for the store. The system performs a fuzzy or advanced search based on the logon ID that you specify. (For example, if you type the letter A, the system will search for any occurrences of logon IDs containing the letter A, not simply IDs that begin with the letter A).

     Note: The system performs a fuzzy search based on the Originator logon ID provided, and an exact search based on the values provided for all other fields on this dialog

   – In the Return status pull-down list, select the status of the return.

3. Click **Find**. The system displays a list of returns that match the search criteria.

11.6.23 Operations: Create a Return

WebSphere Commerce supports returns using return merchandise authorization (RMA) functionality. A return is a record of a customer's request for a refund, to return merchandise, or both. The term is used whether an RMA is issued in advance of merchandise receipt or the transaction is begun at the time of merchandise receipt.

If a customer is not satisfied with a purchase, the merchant can offer a refund for the purchase. To return an order (or an order item or a product within an order), it must first be in one of the following states:

R Released
S Shipped

D	Deposited
F	Ready for remote fulfillment
G	Pending remote fulfillment
C	Completed

However, to return an order (or order item within an order) using the New Return wizard in the WebSphere Commerce Accelerator, both the order and order item within the order must be in either S (shipped) or D (deposited) state. To return items in any state (R, F, G, C, S, or D), use the ReturnItemAdd command.

Some products may be configured as non-refundable; for example, for hygienic reasons, intimate apparel sold directly to consumers would not be refundable. Whether the merchandise must be returned for a refund is configurable at the product level. For example, a specialty food dealer may want non-perishable food products returned but not fresh produce. A suggested refund amount and possible methods for issuing refunds are calculated according to system settings and policies. System settings and policies are overridable on a case-by-case basis with the appropriate level of security. The merchant may choose to issue RMAs in preparation for receiving returned merchandise and issuing a refund.

The possible payment methods for issuing a refund are calculated using system settings and policies. The default implementation utilizes a simple calculation. A refund may be issued against the original form of payment or to a line of credit, depending on system policies. The `CalculateReturnCreditVehicleCmdImpl` task command provides more details.

If the merchant chooses to issue RMAs, these can be created using a self-service interface utilizing an automatic approval mechanism built into the returns management system. A Customer Service Representative can also create an RMA or modify an existing one. The Customer Service Representative has the ease of use provided by the automatic approval mechanism but also has the flexibility to make any necessary adjustments and manually approve an RMA.

Using the commands provided in the returns system, a customer can request an authorization to return products they have ordered. With the Customer Service Representative's assistance, an RMA can also be issued for products ordered by others, such as gifts, products ordered outside the customer's business organization, or items for which the original order cannot be identified. You can read more about the automatic approval mechanism in the online help system.

To create a return on behalf of a customer:

1. You can create a return by searching for the original order or the customer, and then launching the New Return wizard, by doing one of the following:
   - From the Operations menu, click **Find Orders** to open a search dialog.

If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

Search for the order that contains the product for the return, by providing at least one of the following order information items:

- In the Order number field, type the order number, which uniquely identifies the order.
- In the Customer logon ID field, type the customer's unique store logon ID. If this search dialog was launched by clicking Find Orders from the Orders list for a particular customer, the customer logon ID is populated with the customer's logon ID for the store.
- From the Order state pull-down list, select the status of the order, such as new or pending.

Click **Find**. The system performs a search and displays a list of orders that match the search criteria.

Select the check box next to the order that you want to work with, and click **New Return** to create a new return. The New Return wizard launches, displaying the Products From Order - Search Results page first.

- From the Operations menu, click **Find Customers** to open a search dialog.

  If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

  Provide all or part of any of the following customer information items:

  - Customer's logon ID
  - Customer's first name
  - Customer's last name
  - Customer's primary phone number
  - Customer's primary e-mail address
  - The city of the customer's contact address
  - The ZIP or postal code of the customer's contact address

  Click **Find**. The system performs a search and displays a list of customers who match the search criteria.

  Select the check box next to the order that you want to work with, and click **New Return** to create a new return. The New Return wizard launches, displaying the Products page first.

2. Provide appropriate information for the fields and click **Next** to save each page. Click **Back** to return to the previous page, if necessary.
3. When you have completed all pages, click **Finish** on the Confirmation page to create the return.

11.6.24 Operations: Find Expected Inventory

This section demonstrates how to find expected inventory for the store.

Expected inventory is received from a vendor, and is typically paid for with a purchase order. Expected inventory is tracked with expected inventory records. These enable an external identifier, typically a purchase order number from an external system, to be recorded to keep track of the inventory that has been ordered, as well as what has and has not arrived.

From the Operations menu, select **Expected Inventory** to open the Expected Inventory page, which lists the store's expected inventory records.

The Expected Inventory page, a typical search results page, enables the user to:

- Scroll page-by-page through results with First, Last, Previous, and Next links.
- Go directly to a page by entering the page number and clicking **Go**.
- Select all rows in the table by selecting the check box at the top of the table.
- Select individual rows by selecting the check box next to each individual row.

The Expected Inventory page also enables the user to perform the following actions specific to expected inventory records:

- Create a new expected inventory record by clicking **New**. This displays the New Expected Inventory Record - General page. For more information about creating expected inventory records, refer to 11.6.25, "Operations: Create Expected Inventory" on page 384.
- Change an expected inventory record by selecting the check box next to the desired record and clicking **Change**. This displays the Change Expected Inventory Record - General page. For more information about changing expected inventory records, refer to 11.6.26, "Operations: Change Expected Inventory" on page 385.
- View the details of an expected inventory record by selecting the check box next to the desired record and clicking **Details**. This displays the Expected Inventory Details page. For more about viewing expected inventory records, refer to 11.6.27, "Operations: View Expected Inventory" on page 385.
- Close an expected inventory record by selecting the check box next to the desired record and clicking **Close**. For more information about closing expected inventory records, refer to 11.6.30, "Operations: Close Expected Inventory" on page 387.
- Delete an expected inventory record by selecting the check box next to the desired record and clicking **Delete**. For more information about deleting expected inventory records, refer to 11.6.31, "Operations: Delete Expected Inventory" on page 387.

- Generate expected inventory record reports by clicking **Reports** to display the Expected Inventory Reports page. For more information about generating expected inventory record reports, refer to 11.6.32, "Operations: Expected Inventory Reports" on page 388.

11.6.25 Operations: Create Expected Inventory

This section shows how to create expected inventory records for the store. Expected inventory is described in 11.4.9, "Merchandise: Expected Inventory" on page 357.

1. From the Operations menu, select **Expected Inventory**. This displays the Expected Inventory page.
2. Click **New**. This displays the New Expected Inventory Record - General page that is used to enter the general details for a new expected inventory record.
3. Enter the following details:
   - Vendor: The name of the vendor for the product
   - External ID: Identifier for the expected inventory record (typically, a purchase order number)
   - Order date: The date the order was placed with the vendor
4. Click **Next**. This displays the New Expected Inventory Record - Details page used to specify the expected products.
5. Click **Add** to add products to be ordered. This opens the Find Products page.
6. Enter either a partial product name or a SKU and click **Find** to produce the Products - Search Results page.
7. To add products to the expected inventory record, select the check box next to the desired products and click **OK**. This displays the Add Expected Inventory Details page.
8. Enter the following details:
   - Fulfillment center: The name of the fulfilment center expecting the product
   - Expected date: The date the product is expected to arrive
   - Quantity: The number of products expected
   - Comments: Any additional comments
9. Click **OK** to return to the New Expected Inventory Record - Details page.
10. The newly selected product should be listed now.To remove it, select the check box next to the product and click **Remove**. To change the details, select the check box next to the product and click **Change**.

11.After all products have been specified, click **Finish**.

12.A window pops up indicating that the expected inventory record was created successfully. Click **OK** to close the pop-up window.

11.6.26 Operations: Change Expected Inventory

This section shows how to change the details for an expected inventory record.

1. Follow the steps outlined in 11.6.24, "Operations: Find Expected Inventory" on page 383 to find the desired expected inventory record.
2. On the Expected Inventory search results page, check the box next to the desired record and click **Change**. This opens the Change Expected Inventory Record: General page, which is used to modify the details of an expected inventory record.

   This page is exactly the same as the Create Expected Inventory Record - General page except for the following minor differences:

   – All fields are prepopulated with the existing values.

   – Instead of clicking **Next** to gain access to the Details section, it is a menu option on the left side of the pane. Clicking a menu option opens the appropriate page.

   – All other fields can be modified following the Create Expected Inventory process outlined in 11.6.25, "Operations: Create Expected Inventory" on page 384.
3. After all modifications have been made, click **OK** to save the changes.
4. A window pops up to indicate that the expected inventory record details were updated successfully. Click **OK** to close it.

11.6.27 Operations: View Expected Inventory

This section shows how to view the details of an expected inventory record.

1. Follow the steps outlined in 11.6.24, "Operations: Find Expected Inventory" on page 383 to find the desired expected inventory record.
2. On the Expected Inventory search results page, check the box next to the desired record and click **Details** to open the Expected Inventory Details page.

On the Expected Inventory Details search results page, a user can:

- Scroll page-by-page through results with First, Last, Previous, and Next links.
- Go directly to a page by entering the page number and clicking **Go**.
- Select all rows in the table by selecting the check box at the top of the table.
- Select individual rows by selecting the check box next to each individual row.

The Expected Inventory Details page also enables the user to perform the following actions specific to the products listed:

- Receive the expected inventory record by selecting the check box next to the product being received and clicking **Receive**. This displays the Receive Expected Inventory page. For more about receiving expected inventory, refer to 11.6.28, "Operations: Create Expected Inventory Receipt" on page 386.
- View the receipts for the expected inventory record by selecting the check box next to the product being received and clicking **Prior Receipts**. This displays the Prior Receipts page. For more information about viewing receipts for expected inventory, refer to 11.6.29, "Operations: View Expected Inventory Receipt" on page 387.

11.6.28 Operations: Create Expected Inventory Receipt

This creates a receipt when the expected inventory is received by the fulfillment center. An expected inventory record cannot be deleted after inventory has been received against it, and expected inventory details cannot be changed or deleted after any of that inventory has been received.

Before inventory for a product can be received, the product must be defined in the WebSphere Commerce system, regardless of whether the inventory receipt is expected or ad hoc.

Follow the steps in 11.6.24, "Operations: Find Expected Inventory" on page 383 to find the desired expected inventory record details. After the record has been found on the Expected Inventory Details search results page, follow these steps:

1. Select the check box next to the desired record and click **Receive**. This displays the Receive Expected Inventory page, which is used to generate a receipt when expected inventory arrives at the fulfillment center.
2. Enter the following details:

Receiving date	Date of the inventory receipt
Currency	Currency used to purchase the inventory
Receiving quantity	The actual number of products received. This may differ from the expected quantity
Unit Cost	Unit cost of the product being received
Receipt Comments	Additional comments about the receipt
Quality Comments	Additional comments about the quality of the good received

3. Click **OK**. A window pops up to indicate that the expected inventory receipt was created successfully. Click **OK** to close it.

11.6.29 Operations: View Expected Inventory Receipt

This section demonstrates how to view a receipt for expected inventory.

1. Follow the steps in 11.6.24, "Operations: Find Expected Inventory" on page 383 to find the desired expected inventory record details. The record appears on the Expected Inventory Details search results page.
2. Select the check box next to the desired record and click **Prior Receipts**. This opens the Prior Receipts page, which displays the receipts created for an expected inventory record.

The Prior Receipts page is a typical search results page. It enables the user to:

- Scroll page-by-page through results with First, Last, Previous, and Next links.
- Go directly to a page by entering the page number and clicking **Go**.
- Select all rows in the table by selecting the check box at the top of the table.
- Select individual rows by selecting the check box next to each individual row.

11.6.30 Operations: Close Expected Inventory

This section demonstrates how to close an expected inventory record and remove it from the list of records displayed on the Expected Inventory page.

After all inventory has been received, the expected inventory record should be closed. Note that after an expected inventory record is closed, it cannot be reopened. Ensure that all of the inventory that is associated with the expected inventory record has been received before closing.

1. Follow the steps in 11.6.24, "Operations: Find Expected Inventory" on page 383 to find the desired expected inventory record.
2. On the Expected Inventory search results page, select the check box next to the desired record and click **Close**.
3. When the confirmation window pops up, click **OK**.

11.6.31 Operations: Delete Expected Inventory

To delete an expected inventory record and remove it from the list of records displayed on the Expected Inventory page:

1. Follow the steps in 11.6.24, "Operations: Find Expected Inventory" on page 383 to find the desired expected inventory record.
2. On the Expected Inventory search results page, check the box next to the desired record and click **Delete**.
3. At the confirmation pop-up dialog window, click **OK**.

11.6.32 Operations: Expected Inventory Reports

There are several reports available for expected inventory. This section demonstrates how to produce them.

1. From the Operations menu, select **Expected Inventory**. This displays the Expected Inventory page.
2. Click **Reports**. This displays the Expected Inventory Reports page.
3. Select one of the available reports:
   a. Open Expected Inventory Records
   b. Inventory Receipts through Expected Inventory Records

   A report selection page is displayed.
4. Enter a start date for the reporting period.
5. Enter an end date for the reporting period.
6. Either check the All SKUs check box or check the Selected SKUs check box and create a list of SKUs by using the Find and Remove buttons.
7. Select at least one fulfillment center by selecting it from the Available fulfillment centers list and clicking the **<< Add** button next to the list.
8. Select at least one vendor by selecting it from the Available vendors list and clicking the **<< Add** button next to the list.
9. Click **OK** when complete. This displays the report.
10. Click **Print** to print a hard copy of the report.
11. Clicking **OK** returns you to the report selection page.

11.6.33 Operations: Find Inventory

This section demonstrates how to find inventory for the store.

1. From the Operations menu, select **Find Inventory**. This displays the Find Inventory page.
2. Enter a partial product name or SKU and click **Find**. This displays the Inventory - Search Results page.

The Inventory - Search Results page is a typical search results page that enables the user to:

- Scroll page-by-page through results with First, Last, Previous, and Next links.
- Go directly to a page by entering the page number and clicking **Go**.
- Select all rows in the table by selecting the check box at the top of the table.
- Select individual rows by selecting the check box next to each individual row.

This page also enables the user to perform these actions that are specific to inventory records:

- Create an ad hoc receipt for unexpectedly received inventory by clicking **Ad Hoc Receipt**. This displays the Ad Hoc Receipt page. For more information about creating ad hoc receipts, refer to 11.6.34, "Operations: Create Ad Hoc Inventory Receipt" on page 389.
- Adjust the quantity of inventory on hand by clicking **Adjust Quantity**. This displays the Adjust Quantity page. For more information about adjusting the quantity of inventory, refer to 11.6.35, "Operations: Adjust Inventory Quantity" on page 390.

11.6.34 Operations: Create Ad Hoc Inventory Receipt

This section demonstrates how to create a receipt for unexpected inventory.

Ad hoc inventory receipts are created when inventory arrives at a fulfillment center without a corresponding expected inventory record. This could be due to an unexpected inventory arrival, or it could be the choice of the merchant not to use expected inventory records to record inventory receipts. Products must exist in the WebSphere Commerce system in order to be received, whether the inventory receipt is expected or ad hoc.

Follow the steps outlined in "Operations: Find Inventory" on page 388 to find the inventory that was received. After the desired inventory has been located on the Inventory Search Results page, follow these steps:

1. Select the check box next to the desired SKU and click **Ad Hoc Receipt**. This displays the Ad Hoc Receipt page, which is used to create an ad hoc receipt for inventory that has no expected record.
2. The Ad Hoc Receipt page is similar to the Receive Expected Inventory page outlined in 11.6.28, "Operations: Create Expected Inventory Receipt" on page 386. The only difference is that the Ad Hoc Receipt page enables the user to select the vendor from which the goods were received. Fill out the details as in the Create Expected Inventory Receipt process in 11.6.28, "Operations: Create Expected Inventory Receipt" on page 386.
3. After the details have been entered, click **OK**.

   A window pops up to indicate that the ad hoc receipt was created successfully. Click **OK** to close it.

11.6.35 Operations: Adjust Inventory Quantity

This section demonstrates how to adjust the quantity of available inventory.

Inventory adjustments are made when the amount of inventory in the fulfillment center is not the same as the amount of inventory recorded in the WebSphere Commerce Accelerator. This could happen for several reasons. For example, if products in a fulfillment center are stolen or damaged, the amount of available inventory must be adjusted to reflect the situation. If a count is taken in a fulfillment center and there are more products than previously thought, this too must be recorded. WebSphere Commerce provides a sample set of inventory adjustment codes that define reasons for the inventory adjustment. For more information about inventory adjustment codes, refer to the *WebSphere Commerce Information Center*.

Important: Do not use the Adjust Quantity page to receive inventory. If your inventory has an associated expected inventory record, follow the process for creating an expected inventory receipt. Otherwise, follow the process for creating an ad hoc inventory receipt.

Follow the steps in 11.6.33, "Operations: Find Inventory" on page 388 to find the inventory that is to be adjusted. After the desired inventory has been located on the Inventory Search Results page, follow these steps:

1. Select the check box next to the desired SKU and click **Adjust Quantity**. This displays the Adjust Quantity page, which is used to manually adjust the quantity of inventory units on hand.
2. The Adjust Quantity page displays the current quantity of units on hand. Enter the following details:
   - To increase the quantity levels, select **Increase quantity** and enter a value by which to increase the quantity.
   - To decrease the quantity levels, select **Decrease quantity** and enter a value by which to decrease the quantity.
   - Select an adjustment reason.
   - Enter additional comments if needed.
3. Click **OK**. This displays a pop-up dialog window that prompts the user to confirm the increase or decrease.
4. Click **OK**. This displays a pop-up dialog window that indicates that the inventory levels were adjusted successfully.
5. Click **OK** to close it.

11.6.36 Operations: Proceed with Order Payment

This section demonstrates how to proceed with the payment of an order that has a status of Payment Authorization Requires Review. An order can take on this state if an error occurred during payment authorization and thus requires manual review by the administrator.

Follow the steps in 11.6.5, "Operations: Find Orders" on page 369 to find the order. When it appears on the Orders search results page, follow these steps:

1. Select the check box next to the order and click **Proceed with Payment**. This displays the Proceed with Payment page, which displays whether the payment was allowed to proceed. If the operation is successful, the order status changes to Payment approved.
2. Click **OK**.

11.6.37 Operations: Process Order Payment

To process payments for orders placed with the store:

1. Follow the steps in 11.6.5, "Operations: Find Orders" on page 369 to find the order.
2. On the Orders search results page, select the check box next to the order and click **Process Payment**. This displays the list of payments for that order on the Process Payments - Order Search Results page.

The Process Payments - Order Search Results page is exactly the same as the Approve payments page. Refer to 11.6.38, "Operations: Approve Payment" on page 391 for more information regarding approving payments.

11.6.38 Operations: Approve Payment

This section demonstrates how to approve a payment for an order placed with the store.

1. From the Operations menu, select **Approve Payment** to open the Approve page that is used to approve payments for orders placed with the store.
2. This page provides several ways to approve the payment. Selecting either **Approve Selected** or **Approve All** produces the Approve Results page.
3. Alternatively, the user can view the payment details before the approval by clicking the **Order number** link on the Approve Payments page.

   This loads the Order page.

   Refer to the online help system for information about the displayed fields.

4. The Order page provides these options:

Approve	Approve the order.
Sale	Approve and deposit the order. For more information about sale payments, refer to 11.6.39, "Operations: Sale Payment" on page 392.
Credit	Credit a refund for the order. For more information regarding credit payments, refer to 11.6.40, "Operations: Credit Payment" on page 393.
Cancel	Cancel the payment. For more information regarding cancelling payments, refer to 11.6.42, "Operations: Cancel Payment" on page 394.

   To approve the order click **Approve**. This displays the Order Approve page. Refer to the online help system for information about the displayed fields.

5. Enter the following details:

Approval Amount	Amount approved for this payment.
Authorization Code	The reason for approval.
Decline Reason	Leave this blank for approval.
AVS Result Code	Address Verification System code used to identify the cardholder's address.

   Click **OK** to return to the Order details page.

   This page now indicates that the order was approved successfully: The payment status for the order is Approved and the order status is Payment Approved.

11.6.39 Operations: Sale Payment

This section demonstrates how to make a sale payment for an order placed with the store. A sale payment performs both an approval and deposit in one step.

1. From the Operations menu, select **Approve Payment** to display the page that is used to approve payments for orders placed with the store.
2. The Approve Payment screen provides several ways to make a sale payment:

Sale selected	Clicking this button approves and deposits only selected payments.
Sale all	Clicking this button approves and deposits all of the payments that are listed.

   Selecting either of these options produces the Approve Results page.

3. Alternatively, you can view payment details before approving the sale by clicking the **Order number** link on the Approve payments page. This loads the Order page.

   Refer to the online help system for information about the displayed fields.
4. The Order page provides the following options:

Approve	Approve the order. For more information, refer to 11.6.38, "Operations: Approve Payment" on page 391.
Sale	Approve and deposit the order.
Credit	Credit a refund for the order. For more information, see 11.6.40, "Operations: Credit Payment" on page 393.
Cancel	Cancel the payment. For more information, refer to 11.6.42, "Operations: Cancel Payment" on page 394.

5. To make the sale payment, click **Sale**. This displays the Order Sale page used to approve the sale payment for the order.
6. Enter the Sale Amount and click **OK**. This redisplays the Order details page with a status message that indicates that the order was approved and deposited successfully.

   The payment status for the order is now Deposited and the order status is Payment Approved.

11.6.40 Operations: Credit Payment

This section demonstrates how to create a credit payment for an order placed with the store. If a customer is not satisfied with their purchase, the merchant can offer a refund for the purchase. A credit payment is issued to refund an order.

Follow the steps in 11.6.51, "Operations: Find Payment" on page 398 to find the desired payment. When it appears on the Find Payment - Order Search page:

1. Click the **Order number** link for the payment. This displays the Order details page, which shows the details of the payment.
2. Click **Credit** to open the Order - Create credit page.
3. Enter the following details:

Credit Amount	Amount to be refunded to the customer
Authorization Code	The reason for issuing the refund
Decline Reason	Left blank for credit approval

4. Click **Credit**. This re-displays the Order details page with a message that indicates that the credit was successful. A credit payment against the order with a credit status of Refunded will be created.

11.6.41 Operations: Reject Payment

The process for rejecting a payment is similar to the approval process that was outlined in 11.6.38, "Operations: Approve Payment" on page 391 except that on the Order Approve page, a reason is entered in the decline reason field to indicate why the payment was rejected.

Clicking OK on this page with a value in the decline reason field redisplays the Order Approve page showing a rejection message. The payment status of the order has become Declined.

11.6.42 Operations: Cancel Payment

To cancel a payment for an order placed with the store:

1. Follow the steps in 11.6.51, "Operations: Find Payment" on page 398 to find the desired payment.
2. When it appears on the Find Payment - Order Search page, click the **Order number** link for the payment to open the Order details page. Refer to the online help system for information about the displayed fields.
3. Click **Cancel**. This redisplays the Order details page with a message that indicates that the order was cancelled successfully. The status of the payment is now be Cancelled.

11.6.43 Operations: Delete Payment

This section shows how to delete a payment for an order placed with the store. This functionality is provided to clean out closed and cancelled payments.

1. Follow the steps in 11.6.51, "Operations: Find Payment" on page 398 to find the desired payment.
2. When it appears on the Find Payment - Order Search page, click the **Order number** link for the payment to open the Order details page.
3. Click **Delete**. This displays a message indicating the payment was deleted successfully. The payment will no longer exist in the system.

11.6.44 Operations: Close Payment

To close a completed payment:

1. Follow the steps in 11.6.51, "Operations: Find Payment" on page 398 to find the desired payment.
2. When it appears on the Find Payment - Order Search page, click the **Order number** link for the payment to open the Order details page.
3. Click **Close**. This redisplays the Order details page with a message that indicates that the order was closed successfully.

The status of the payment is now Closed.

11.6.45 Operations: Deposit Payment

This section demonstrates how to deposit an approved payment for an order placed with the store. Payments that have been manually approved must be manually deposited into a batch. A payment batch is used to save on transactional costs associated with payment settlement.

1. From the Operations menu, select **Deposit Payment**.
2. This displays the Deposit payment page, which lists all payments that are ready to deposit and provides several ways to deposit individual payments or groups of payments:

Deposit selected	Deposit only the selected payments.
Deposit all	Deposit all of the payments that are listed.

   Selecting either of these options produces the Deposit Results page.
3. You can also view the payment details before the deposit. Click the **Payment number** link on the Deposit payments page to load the Order details page, which provides the following options:

Deposit	Approve the order.
Void	Cancel a refund for an order. For more information regarding void payments, refer to 11.6.46, "Operations: Void Payment" on page 396.

4. To approve the order, click **Deposit**. This opens the Order Payment page, which is used to deposit the payment into a batch that is ready for settlement.
5. Optionally, you can modify the number in the Deposit Amount field (if a value other than the full amount of the payment is to be deposited) and click **Deposit**. This redisplays the Order Payment page showing a message indicating that the payment was deposited successfully. The status of the payment is now Deposited.

11.6.46 Operations: Void Payment

This functionality is provided to cancel a payment. If payment is a credit payment then it has the effect of cancelling the refund. If the payment has been settled in a batch or is in the Closed state, it cannot be made void.

1. Follow the steps in 11.6.51, "Operations: Find Payment" on page 398 to find the desired payment.
2. When it appears on the Find Payment - Order Search page, click the **Order number** link for the payment. This displays the Order details page.
3. Click the **Payment Number** link in the payments table at the bottom of the pane. This displays the Order Payment page.
4. Click **Void**. This re-displays the Order Payment page with a message indicating that the payment was voided successfully. The status of the payment is now Void.

11.6.47 Operations: Void Deposited Payment

This functionality moves the payment out of the batch and from the Deposited state back to the Approved state.

1. Follow the steps in 11.6.51, "Operations: Find Payment" on page 398 to find the desired payment.
2. When it appears on the Find Payment - Order Search page, click the **Order number** link for the payment. This displays the Order details page.
3. Click the **Payment Number** link in the payments table at the bottom of the screen. This displays the Order Payment page.
4. Click **Void Deposit**. This redisplays the Order Payment page with a message indicating that the deposited payment was reversed successfully. The status of the payment is now Approved.

11.6.48 Operations: Settle Payment Batch

This section demonstrates how to settle deposited payments for orders placed with the store. Payments that have been deposited into a batch must be settled. The process of settlement submits the batch of deposited payments to a

transaction processor in order for the store to receive payment for goods shipped.

1. From the Operations menu, select **Settle Payment**. This displays the Settle payments page.
2. The Settle payment screen lists all batches that are ready for settlement and provides several ways to settle individual batches or groups of batches:

Settle selected	Settle only the selected batches.
Settle all	Settle all listed batches.

   Selecting either of these options produces the Settle Results page, which shows that the status of all payments in the batch is now Completed.
3. Alternatively, the user can view the batch details before the settlement by clicking the **Batch number** link on the Settle payments page. This loads the Batch summary page, which displays the summary details of the batch that is to be settled.
4. For more information about the batch, click the **Batch Details** link to load the Batch with Details page, which is the same as the Batch summary page except that it lists the specific payments that make up the batch.
5. To settle the batch, click **Settle**. This displays the Batch - Settle page.
6. Enter the Financial Institution Batch Identifier, which is the unique identifier for the financial institution that will process the batch.
7. Click **Settle**. This redisplays the Batch with Details page with a message indicating that the batch was settled successfully. The status of the batch and all payments in the batch is now Completed.

11.6.49 Operations: Purge Payment Batch

This functionality is provided to undo all payment deposits that are contained in the batch and thus can only be performed on batches with a status of Open. It removes all payments from the batch and returns them to Approved status.

1. Follow the steps in 11.6.51, "Operations: Find Payment" on page 398 to find the desired payment batch.
2. When it appears on the Batch Search Results page, click the **Batch number** link for the batch. This displays the Batch Summary page.

   Refer to the online help system for information about the displayed fields.
3. Click **Purge**. This displays the Batch Details page with a message prompting to confirm the purge of the batch.

4. Click **Purge**. This renews the Batch Details page showing a message that the batch was purged successfully. All payments that were contained in the batch have been removed and their status has been reset to Approved.

11.6.50 Operations: Delete Payment Batch

This functionality is provided to clean out settled batches and thus can only be performed on batches with a status of Closed. Note that first all payments and credits within the batch must be deleted. For more information about deleting payments, refer to 11.6.43, "Operations: Delete Payment" on page 394.

1. Follow the steps in 11.6.51, "Operations: Find Payment" on page 398 to find the desired payment batch.
2. When it appears on the Batch Search Results page, click the **Batch number** link for the batch to display its Batch Summary page.
3. Click **Delete**. This displays the Batch Details page with a message confirming the user to select the delete button again to remove the batch.
4. Click **Delete**. This displays the Batch Details page with a message indicating that the batch was deleted successfully.

The batch will be removed from the system.

11.6.51 Operations: Find Payment

This section shows how to find a payment for an order that has been placed with the store.

1. From the **Operations** menu, select **Find Payment** to open the Order Search page.
2. Enter at least one of the following search criteria:

Merchant	Select the store with which the order was placed.
Order Number	
State	Select one or more status categories.
Payment Type	
Order Date After	Enter a date before the order was submitted.
Order Date Before	Enter a date after the order was submitted.
Order Amount Currency	
Order Amount Greater than or equal to	
Order Amount Less than or equal to	

Account	Select an account that correlates to the store, payment type, order number, and currency used.

To clear all of the fields, click **Reset**.

3. After the search criteria have been entered, click **Search**. This opens the Order Search Results page.
4. Select the check box next to each applicable order. The following actions can be taken on the payments, depending on their status:

Approve Selected Orders	Approves the selected payments. See 11.6.38, "Operations: Approve Payment" on page 391.
Sale Selected Orders	Approves and deposits the selected payments. Refer to 11.6.39, "Operations: Sale Payment" on page 392.
Deposit Selected Orders	Deposits the selected payments. See 11.6.45, "Operations: Deposit Payment" on page 395.

5. Individual order details can be displayed by clicking the **Order number** link to display the Order details page.

   The Order details page displays detailed information about the payment for the order and the cardholder who made the payment. Refer to the online help system for information about the displayed fields.

6. The following actions can be applied (depending on payment state):

Approve	Approve the payment. Refer to "Operations: Approve Payment" on page 391 for more about the approval of payments.
Sale	Approve and deposit the payment. Refer to "Operations: Sale Payment" on page 392.
Credit	Credit a refund payment. Refer to "Operations: Credit Payment" on page 393.
Deposit	Deposit the payment. Refer to "Operations: Deposit Payment" on page 395.
Cancel	Cancel the payment. Refer to 11.6.42, "Operations: Cancel Payment" on page 394.
Void	Void the payment. Refer to 11.6.46, "Operations: Void Payment" on page 396.
Close	Close the payment. Refer to 11.6.44, "Operations: Close Payment" on page 394.
Delete	Delete the payment. Refer to 11.6.43, "Operations: Delete Payment" on page 394.

11.6.52 Operations: Find Payment Batch

This section demonstrates how to find a batch of payments for orders that have been placed with the store.

1. From the Operations menu, select **Find Payment Batch**. This opens the Batch Search page.
2. Enter at least one of the following optional search criteria:

Merchant	Select the store for which the batch was created.
Batch Number	To search for a specific batch, enter the number.
State	Select one or more specific batch states (Open, Closed).
Status	Select one or more specific batch statuses (Balanced or Out of balance). Balanced means that all of the totals for the payments within the batch are balanced.
Payment Type	Select the type of payment used to process the batch.
Batch Open Date After	Enter a date before the batch was opened.
Batch Open Date Before	Enter a date after the batch was opened.
Batch Close Date After	Enter a date before the batch was closed.
Batch Close Date Before	Enter a date after the batch was closed.
Account	Select an account that correlates to the store, payment type, order number, and currency used.

   To clear all fields, click **Reset**.

3. After the search criteria have been entered, click **Search**. This displays the Batch Summary page. Individual batch details can be displayed by clicking the **Batch number** link.
4. This opens the Batch Search Results page. Individual batch details can be displayed by clicking the **Batch number** link.

   The Batch Summary page displays summary information about the batch. For more detailed information, click the **Batch Details** link to display the Batch Details page. This lists further information about the individual payments that make up the batch. Refer to the online help system for information about the displayed fields if needed.

5. The following actions can be applied (depending on the batch state):

Settle	Submit the batch for processing. For more information regarding the settlement of batches, refer to 11.6.48, "Operations: Settle Payment Batch" on page 396.
Purge	Remove the payments from the batch. For more information about purging batches, refer to 11.6.49, "Operations: Purge Payment Batch" on page 397.
Delete	Delete the batch. For more information regarding the deletion of batches, refer to 11.6.50, "Operations: Delete Payment Batch" on page 398.

11.7 Reports menu

The reports menu enables an administrator to generate these types of reports:

- Reports: Inventory Reports
- Reports: Order Management Reports
- Reports: Operational Reports

Note: Several of the reports contain information about store and site activity such as:

- Pages viewed
- Number of visitors
- Shopping carts created
- Products viewed

For this data to be populated in the reports, two event listeners must be enabled and started in the Configuration Manager. If your reports show zeroes in these or related values, follow the instructions in "Configure for reporting" on page 486.

11.7.1 Reports: Inventory Reports

The following inventory reports are available:

- Inventory Receipts by Product

  This report lists all receipts: receipts received through expected inventory records, ad hoc receipts, and receipts added as a result of product disposition. For more information about generating this report, refer to 11.7.2, "Reports: Inventory Receipts by Product" on page 402.

- Inventory Adjustments

  This report depicts inventory adjustments by product. For more information, refer to 11.7.3, "Reports: Inventory Adjustments" on page 403.

- Inventory Status

  This report depicts the current inventory allocation and receipt status of products in stock. For more information, refer to 11.7.4, "Reports: Inventory Status" on page 404.

- Products on Backorder

  This report depicts cumulative backorder information by product. It shows only products whose expected ship date is prior to the current date. For more information, refer to 11.7.5, "Reports: Products on Backorder" on page 405.

- Open Expected Inventory Records

  This report depicts open expected inventory records. For more information, refer to 11.7.6, "Reports: Open Expected Inventory Records" on page 406.

To access the Inventory Reports page: From the Reports menu, select **Inventory Reports**.

11.7.2 Reports: Inventory Receipts by Product

This section demonstrates how to generate a report for the store that lists Inventory Receipts by Product.

The Inventory Receipts by Product report lists all receipts received through expected inventory records, ad hoc receipts, and receipts added as a result of product disposition.

1. From the Reports menu, select **Inventory Reports**.
2. Click the **Inventory Receipts by Product** link. This opens the Inventory Receipts by Product page.
3. Enter the start and end date for the report, along with the following details:
   - Include in this report: Select either All SKUs or individual Selected SKUs by using the **Add** and **Remove** buttons.
   - Selected fulfillment centers: Use the **Add** button to add at least one center from the Available fulfillment centers list. Remove selected fulfillment centers by clicking **Remove**.
4. Click **OK** to produce the Inventory Receipts by Product report content page, which displays the following information:
   - The report criteria used to generate the report.
   - The date and time the report was generated.

– A list of inventory receipts. For each receipt, the following is displayed:

SKU	Stock Keeping Unit code for received products.
Description	Description of the received products.
Date Received	Date the products were received.
Receipt Type	The type of receipt (either Ad Hoc or Expected).
Fulfillment Center	The fulfillment center that received the products.
Qty Received	The number of products received.
Qty Units	The unit of measure for the quantity of products received.
Receipt Comment	Any additional comments added to the receipt.
Quality Comment	Any quality comments added to the receipt.

5. To print the report, click **Print**.

11.7.3 Reports: Inventory Adjustments

This section demonstrates how to generate an Inventory Adjustments report for the store. This report lists all inventory adjustments by product. This adjustment is performed when the quantity of a product on hand is manually modified:

1. From the Reports menu, select **Inventory Reports**.
2. Click the **Inventory Adjustments** link to open the Inventory Adjustments page.
3. Enter the start and end dates for the report, along with the following details:
   – Include in this report: Select either All SKUs or individual Selected SKUs by using the **Add** and **Remove** buttons.
   – Selected fulfillment center: Select at least one fulfillment center by using the **Add** button to add one from the list of Available fulfillment centers. Remove selected fulfillment centers by clicking **Remove**.
   – Selected inventory adjustment reasons: Select at least one inventory adjustment reason by using the **Add** button. Remove selected reasons by clicking **Remove**.
4. After the report criteria have been entered, click **OK**. This opens the Inventory Adjustments report content page, which displays the following information:
   – The report criteria used to generate the report.
   – The date and time the report was generated.
   – A list of inventory adjustments, each of which includes:

Adjustment Date	The date the adjustment was made.

SKU	Stock Keeping Unit code for the adjusted product.
Description	Description of the adjusted product.
Fulfillment Center	The fulfillment center for the adjusted product.
Qty Adjusted	The number of products that were adjusted. If products were added this will be a positive figure, otherwise if products were removed it will be a negative figure.
Qty Units	The unit of measure for the quantity of products adjusted.
Adjustment Description	The reason for the adjustment.
Adjustment Comment	Any additional comments about the adjustment.

5. To print the report, click **Print**.

11.7.4 Reports: Inventory Status

This section demonstrates how to generate an Inventory Status report for the store. The Inventory Status report lists the current inventory allocation and receipt status of products in stock.

1. From the Reports menu, select **Inventory Reports**.
2. Click the **Inventory Status** link. This opens the Inventory Status page.
3. Enter the following details:
   – Include in this report: Select either all SKUs or individual Selected SKUs by using the **Add** and **Remove** buttons.
   – Selected fulfillment center: Select at least one fulfillment center from the list of Available fulfillment centers by using the **Add** button. Remove selected fulfillment centers by highlighting them and clicking **Remove**.
4. After the report criteria have been entered, click **OK**. This opens the Inventory Status report content page.

   The Inventory Status report content page displays the following information:
   – The report criteria used to generate the report.
   – The date and time the report was generated.
   – A list of inventory products. For each product, the following is displayed:

SKU	Stock Keeping Unit code for the product
Description	

Fulfillment Center	The fulfillment center for the product
Qty Units	The unit of measure for the quantity of products
Qty On Site	
Qty In Progress	
Qty In Reserve	
Qty Orderable	
Qty Allocated to Backorders	
Qty on Backorder	
Last Receipt Date	When a receipt was last generated for the product

5. To print the report, click **Print**.

11.7.5 Reports: Products on Backorder

This section demonstrates how to generate a Products on Backorder report for the store. This report summarizes backorder information by product. It only shows products whose expected ship date is prior to the current date.

1. From the Reports menu, select **Inventory Reports**.
2. Click the **Products on Backorder** link to open the Products on Backorder page.
3. Enter the following details:
   - Include in this report: Select either All SKUs or individual Selected SKUs by using the **Add** and **Remove** buttons.
   - Selected fulfillment center: Select at least one center from the list of Available fulfillment centers by using the **Add** button. Remove selected fulfillment centers by highlighting them and clicking **Remove**.
4. After the report criteria have been entered, click **OK**. This opens the Products on Backorder report content page.

   The Products on Backorder report content page displays the following information:
   - The report criteria used to generate the report.
   - The date and time the report was generated.
   - A list of products on backorder for the store, each of which includes:
     - Fulfillment Center: name of the fulfillment center that has the product on backorder.
     - SKU: Stock Keeping Unit identifier for the product on backorder.

- Description: description of the product on backorder.
- Total Number of Backorders: total number of backorders waiting on the products to arrive.
- Total Quantity on Backorder: total number of units on backorder.
- Qty Units: unit of measurement for quantity on backorder.
- Earliest Backorder Date: earliest date the products could arrive.
- Earliest Promise Date: earliest date the products were promised to the customer to arrive.
- Earliest Estimated Date: earliest estimated date products could arrive.

5. To print the report, click **Print**.

11.7.6 Reports: Open Expected Inventory Records

This section demonstrates how to generate an Open Expected Inventory Records report, which lists all open expected inventory records for the store.

1. From the Reports menu, select **Inventory Reports**.
2. Click the **Open Expected Inventory Records** link. This opens the Open Expected Inventory Records page.
3. Enter the start and end dates, along with the following details:
   - Include in this report: Select either All SKUs or individual Selected SKUs by using the **Add** and **Remove** buttons.
   - Selected fulfillment centers: Select at least one center from the list of Available fulfillment centers by using the **Add** button. Remove selected centers by clicking **Remove**.
   - Selected fulfillment centers: Use the **Add** button to add at least one center from the Available fulfillment centers list. Click **Remove** to remove centers.
4. After the report criteria have been entered, click **OK**. This opens the Open Expected Inventory Records report content page, which displays the following information:
   - The report criteria used to generate the report.
   - The date and time the report was generated.
   - A list of open expected inventory records for the store. The list includes information for identifying the inventory, shipping dates, origination, and quantities.
5. To print the report, click **Print**.

11.7.7 Reports: Order Management Reports

The following order management reports are available:

- Order Summary: This report summarizes orders by volume (number of orders) and value (in currency). For more information about generating this report, refer to 11.7.8, "Reports: Order Summary" on page 407.
- Overdue Backorders: This report depicts orders that have products on backorder and are overdue as defined by the user. For more information, refer to 11.7.9, "Reports: Overdue Backorders" on page 408.

To access these reports: From the Reports menu, select **Order Management**. This opens the Order Management Reports page.

11.7.8 Reports: Order Summary

This section shows how to generate a Order Summary report for the store. This report, which summarizes shipped orders by volume (number of orders) and value (in currency), It is used to review and analyze store performance.

Restriction: This report is only for orders that have been shipped.

1. From the Reports menu, select **Order Management Reports**.
2. Click the **Order Summary** link. This opens the Order Summary page.
3. Enter the start date and end date that the report should cover. Click **OK**.
4. This opens the Order Summary report content page, which displays the following information:
   - The report criteria used to generate the report.
   - The date and time the report was generated.
   - A summary of orders for the store. The following is displayed:
     - Year: year reported on
     - Month: month reported on
     - Total Product Charges: total amount of money charged for products
     - Total Tax on Products: total amount of tax charged on products
     - Total Shipping Charges: total amount of money charged for shipping
     - Total Adjustments: total amount of money adjusted on orders
     - Total Order Value: total amount of money on orders (taking tax, shipping, and adjustments into consideration)

  - Number of Orders: total number of orders
  - Average Sale per Order: average amount of money per order
  - Currency: currency used for amounts
5. To print the report, click **Print**.

11.7.9 Reports: Overdue Backorders

This section shows how to generate an Overdue Backorders report for the store. The Overdue Backorders report lists the orders that have products on backorder and are overdue.

1. From the Reports menu, select **Order Management Reports**.
2. Click the **Overdue Backorders** link to open the Overdue Backorders page.
3. Enter the following details:
   - Minimum number of days overdue: the smallest number of days overdue. This is calculated only by the date, and does not consider time.
   - Include in this report: Select either All SKUs or individual Selected SKUs by using the **Add** and **Remove** buttons.
4. Click **OK**. This opens the Overdue Backorders report content page, which displays the following information:
   - The report criteria used to generate the report.
   - The date and time the report was generated.
   - A list of overdue backorders for the store. The following is displayed for each backorder:
     - Promised Shipping Date: the products' ship-by date as promised to the customer.
     - Days Overdue: the number of days the backorder is overdue.
     - Expected Shipping Date: the estimated shipping date for products.
     - Order Number: the unique identifier for the order.
     - SKU: Stock Keeping Unit identifier of the product being ordered.
     - Description: description of the product being ordered.
     - Qty Ordered: the quantity of products being ordered.
     - Qty Units: the unit of measurement for the quantity ordered.
5. To print the report, click **Print**.

11.7.10 Reports: Operational Reports

The following operational reports are available:

- Store Activity Report: Provides key criteria for the site such as orders, customer visits, and total sales. For more about generating this report, refer to 11.7.11, "Reports: Store Activity Report" on page 409.
- Order Status Report: Enables you to view details of orders by selecting either a particular order state or all valid order states. Refer to 11.7.12, "Reports: Order Status Report" on page 411.
- Order Item Status Report: Enables you to view details of Orders Items by selecting particular state or all valid Order states. For more about generating this report, refer to 11.7.13, "Reports: Order Item Status Report" on page 413.
- Product Sales Report: Shows sales figures for products sold on your site, including the name of the product, how many times it was ordered, total quantity ordered, and total revenue generated. For more information about this report, refer to 11.7.14, "Reports: Product Sales Report" on page 414.
- Region Report: Shows data about sales and shopper activity for the countries that shoppers provide when they register. For more information about this report, refer to 11.7.15, "Reports: Region Report" on page 414.

To access these reports: From the Reports menu, select **Operational Reports**. This opens the Operational Reports page.

11.7.11 Reports: Store Activity Report

This section demonstrates how to generate a Store Activity report for the store.

The Store Activity report summarizes the key activities of the store such as orders, customer visits, and total sales. It is used as a snapshot of store operations and performance.

1. From the Reports menu, select **Operational Reports**.
2. Click the **Store Activity Report** link to open the Store Activity Report page.
3. Enter the following details:
   - Start date: Enter the date to start reporting.
   - End date: Enter the date to end reporting.
   - Currency: Select a currency for monetary values.
4. Click **OK**. This opens the Store Activity Report content page.

   The Store Activity Report content page displays the following information:

   - The report criteria used to generate the report.

- The date and time the report was generated.
- A summary of store activity as follows:
  - Total Orders: total number of orders placed with the store in the selected time period.
  - Gross Sales: total sales revenue resulting from orders placed with the store (including all adjustments, shipping, and tax charges) in the selected time period.
  - Total Pages Viewed: total number of store pages viewed in the selected time period. This value might be affected by database maintenance.
  - Total unique visitors that came to the site: total number of unique customers who placed orders with the store in the selected time period. This value might be affected by database maintenance, or if a user logged in multiple times using the same browser.
  - Total visits to the site: total number of times the store was visited in the selected time period. This value might be affected by database maintenance, or if a user logged in multiple times using the same browser.
  - Total Orders Shipped: total number of shipped orders that were placed with the store in the selected time period.
  - Total Orders in Pending State: total number of orders that were placed with the store in the selected time period and are waiting for the payment to be authorized.
  - Total orders being reviewed: total number of orders that were placed with the store in the selected time period and are currently under review.
  - Total orders affected by low inventory: total number of orders that were placed with the store that could not be completed due to low inventory levels.
  - Total orders requiring payment authorization review: total number of orders that are unable to be completed because of problems with payment authorization, with a last update time stamp that falls within the selected time period.
  - Total cancelled orders: total number of orders that were cancelled, with a last update time stamp that falls within the selected time period.
  - Total shopping carts created: total number of orders that have a status of Pending that were last updated in the selected time period.

- Total number of categories in the store's catalog: total number of categories in the store's catalog. This does not include categories that have not been marked for deletion.
- Total number of categories viewed on the site: total number of categories viewed in the selected time period. This value might be affected by database maintenance.
- Total number of products in the store's catalog: the total number of SKUs in the store's catalog. This does not include SKUs that have been marked for deletion.
- Total number of products viewed on the site: total number of products viewed in the selected time period. This value might be affected by database maintenance.

5. To print the report, click **Print**.

11.7.12 Reports: Order Status Report

The Order Status Report displays a list of orders and their status depending on the search criteria that is entered. In the resulting report, clicking on the Order ID displays details of the order items that are associated with the order.

To generate an Order Status Report for the store:

1. From the Reports menu, select **Operational Reports**.
2. Click the **Order Status Report** link to open the Order Status Report page.
3. Enter the start date, end date, and the following details:
   - Currency: select a currency for monetary values.
   - The type of orders to report on. The following are supported:
     - All valid orders.
     - All orders awaiting payment authorization.
     - All pending orders.
     - All orders affected by low inventory.
     - All orders that have been shipped.
     - All orders that have been cancelled.
     - All orders that have been backordered.
4. Click **OK**. This opens the Order Status Report content page, which displays:
   - The report criteria used to generate the report.
   - The date and time the report was generated.

- A list of orders and their status. For each order the following is displayed:
  - Order ID: unique order reference number.
  - Order Status: the current status of the order. Refer to the glossary for more information about order status.
  - Last Update time stamp: the date and time the order was last updated.
  - Product Charges: the charges resulting from the price of the products in the order.
  - Adjustments: charges associated with adjustments made to the order.
  - Tax on products: charges associated with tax on products in the order.
  - Shipping charges: charges associated with shipping the order.
  - Tax on shipping: charges associated with any tax on shipping the order.

5. To print the report, click **Print**.
6. To view the details of an order, click the **Order ID** link.
7. Click **OK** on the prompt to continue. This opens the Order Item Details Report page, which displays:
   - The date and time the report was generated.
   - A list of all order items for the order and these details for each order item:
     - Ordered Item: the name of the item being purchased.
     - Estimated Availability Date: the estimated date that the item will be available for shipping.
     - Fulfillment Center: the name of the originating fulfillment center.
     - Fulfillment Status: Valid values include: INT- not yet released for fulfillment, OUT - released for fulfillment, SHIP - shipment confirmed.
     - Inventory Status: the allocation status of inventory for this item. Valid values include: NALC - inventory is neither allocated nor backordered, BO - inventory is backordered, ALLC - inventory is allocated, FUL - inventory has been released for fulfillment.
     - Time Orderitem created: the date the order item was created.
     - Quantity Ordered: the number of quantity of items ordered.
8. To print the report, click **Print**.

11.7.13 Reports: Order Item Status Report

This section demonstrates how to generate an Order Item Status Report for the store. This report displays a list of order items and their status, depending on the search criteria entered.

1. From the Reports menu, select **Operational Reports**.
2. Click the **Orderitem Status Report** link. This opens the Order Item Status Report page.
3. Enter the report start date, end date, and the following details:
   - Currency: select a currency for monetary values.
   - Select the type of order items to report on. The following are supported:
     - All valid orders.
     - All orders awaiting payment authorization.
     - All pending orders.
     - All orders affected by low inventory.
     - All orders that have been shipped.
     - All orders that have been cancelled.
     - All orders that have been back ordered.
4. Click **OK**. This opens the Order Item Status Report content page.

   The Order Item Status Report content page displays the following:
   - The report criteria used to generate the report.
   - The date and time the report was generated.
   - A list of order items and their status. For each order item the following is displayed:
     - Order ID: unique order reference number.
     - Product Ordered: the name of the product ordered.
     - Status: refer to the "Glossary" on page 493 for more about order status.
     - Quantity: the number of products ordered.
     - Sales: total value of the order item.
     - Fulfillment Center: the name of the originating fulfillment center.
     - Fulfillment Status: Valid values include: INT - not yet released for fulfillment, OUT - released for fulfillment, SHIP - shipment confirmed.
     - Inventory Status: the allocation status of inventory for this item. Valid values include: NALC - inventory is neither allocated nor backordered,

BO - inventory is backordered, ALLC - inventory is allocated, FUL - inventory has been released for fulfillment.

5. To print the report, click **Print**.

11.7.14 Reports: Product Sales Report

This section demonstrates how to generate a Product Sales Report for the store. This report displays sales figures for products that were sold through the store, including product name, how many times it was ordered, total quantity ordered, and total revenue generated.

1. From the Reports menu, select **Operational Reports**.
2. Click the **Product Sales Report** link to open the Product Sales Report page.
3. Enter the report start date and end date, and choose the Currency.
4. Click **OK**. This opens the Product Sales Report content page.

   The Product Sales Report content page displays:

   - The report criteria used to generate the report.
   - The date and time the report was generated.
   - A list of product sales. Each product sale shows these details:
     - Catalog Entry: the name of the product sold.
     - Catalog Entry ID: the unique identifier for the product sold.
     - Times Ordered: total number of times this product was ordered.
     - Total Amount Ordered: total quantity of this product that was ordered.
     - Total Sales: total amount of sales generated by this product.
     - Times Viewed: number of times this product was viewed on the site.
5. To print the report, click **Print**.

11.7.15 Reports: Region Report

This section demonstrates how to generate a Region Report for the store. This report displays data about sales and shopper activity for the countries that shoppers provide when they register.

1. From the **Reports** menu, select **Operational Reports**.
2. Click the **Region Report** link. This opens the Region Report page.
3. Enter the report start date, end date, and type of currency for monetary values.

4. Click **OK**. This opens the Region Report content page, which displays:
   - The report criteria used to generate the report.
   - The date and time the report was generated.
   - A list of regions. For each region these details are displayed:
     - Region: name of the world region that generated the sales.
     - Revenue Totals: total amount of money generated by sales to the region.
     - Number of Orders: total number of orders placed by the region.
     - Pages Viewed: number of pages viewed by the region.
     - Number of Customers: number of customers who placed an order from the region.
     - Number of Visits: number of visits made by customers from the region.
     - Quantity Purchased: total number of individual products purchased by the region.
5. To print the report, click **Print**.

Manage a B2B direct store

This chapter describes the functions available to manage an Extended Sites store that was created from a B2B direct asset store such as the B2B Direct Storefront Asset store. All functions are accessed through the WebSphere Commerce Accelerator.

This chapter contains the following sections:

- Overview
- Store menu
- Sales menu
- Products menu
- Auctions menu
- Logistics menu

12.1 Overview

The following menu structure is available through the WebSphere Commerce Accelerator when a store is selected that was built on the business-to-consumer model asset store. The out-of-the-box asset store created when the Extended Sites store archive is published is called *B2B Direct Storefront Asset Store*. Only those options to which the user has access will be displayed.

- Store
  - Open/Close
  - Change Profile
  - Change Pages
  - Upload Logo
  - Change Style
  - Manage Files
  - Change Flow
  - Change Shipping
  - Change Tax
  - Payment Settings
  - Approvals Requests
  - Find Approval Requests
  - Approval Submissions
  - Find Approval Submissions
  - Fulfillment Centers
  - Return Reasons
  - Inventory Adjustment Code
  - Message Type Configuration
  - Report Delivery Settings
  - Collaborative Workspaces
- Sales
  - Accounts
  - RFQs
  - Personalized Attributes
  - Find Customers
  - Find Orders
  - Find Returns
  - Order Management Reports
  - Operational Reports
  - Customer Care
  - Customer Care Queue
  - Approve Payment
  - Deposit Payment
  - Settle Payment
  - Find Payment
  - Find Payment Batch

- Marketing
  - Customer Segments
  - Campaigns
  - Campaign Activities
  - Promotions
  - E-Marketing Spots
  - Ad Copy
  - Experiments
- Products
  - Catalog Management
  - Find Catalog Entries
  - Find Categories
  - Find Bundles or Kits
  - Find Merchandising Associations
  - Sales Catalogs
  - Expected Inventory
  - Vendors
  - Catalog Import
  - Discounts
  - Coupon Promotions
- Auctions
  - Auctions
  - View Auctions
  - Find Auctions
  - Auction Styles
  - Bid Rules
- Logistics
  - Returns
  - Pick Batches
  - Releases Ready to Ship
  - Expected Inventory
  - Find Inventory
  - Inventory Reports

12.1.1 Roles

These predefined roles have access to one or more options on the WebSphere Commerce Accelerator menu when an Extended Sites store based on a B2B direct business model asset store is selected:

- Seller
  - This role has access to all WebSphere Commerce Accelerator functions and tasks in a B2B direct Extended Sites store.

- Account Representative
  - Store
    - Approval Requests
    - Find Approval Requests
    - Approval Submissions
    - Find Approval Submissions
    - Fulfillment Centers
    - Collaborative Workspaces
  - Sales
    - Accounts
  - Marketing
    - Customer Segments
    - Campaigns
    - Campaign Activities
    - Promotions
    - E-Marketing Spots
    - Ad Copy
    - Experiments
  - Products
    - Catalog Management
    - Find Catalog Entries
    - Find Categories
    - Find Bundles or Kits
    - Find Merchandising Associations
    - Sales Catalogs
- Buyer (sell-side)
  - Store
    - Approval Requests
    - Find Approval Requests
    - Approval Submissions
    - Find Approval Submissions
    - Collaborative Workspaces
  - Sales
    - RFQs
    - Order Management Reports
    - Operational Reports
  - Marketing
    - Promotions
  - Products
    - Find Catalog Entries
    - Find Bundles or Kits
    - Find Merchandising Associations
    - Expected Inventory
    - Vendors

- Auctions
  - Auctions
  - View Auctions
  - Find Auctions
  - Auction Styles
  - Bid Rules
- Category Manager
  - Store
    - Approval Requests
    - Find Approval Requests
    - Approval Submissions
    - Find Approval Submissions
    - Return Reasons
    - Inventory Adjustment Code
    - Collaborative Workspaces
  - Sales
    - RFQs
    - Personalized Attributes
    - Order Management Reports
    - Operational Reports
  - Marketing
    - Promotions
  - Products
    - Catalog Management
    - Find Catalog Entries
    - Find Categories
    - Find Bundles or Kits
    - Find Merchandising Associations
    - Expected Inventory
    - Vendors
    - Catalog Import
  - Auctions
    - Auctions
    - View Auctions
    - Find Auctions
    - Auction Styles
    - Bid Rules
  - Logistics
    - Inventory Reports
- Logistics Manager
  - Store
    - Change Shipping
    - Approval Requests
    - Find Approval Requests
    - Approval Submissions

    - Find Approval Submissions
    - Fulfillment Centers
    - Return Reasons
    - Inventory Adjustment Code
    - Collaborative Workspaces
  - Sales
    - Find Orders
    - Find Returns
    - Order Management Reports
    - Operational Reports
  - Products
    - Catalog Management
    - Find Catalog Entries
    - Find Categories
    - Find Bundles or Kits
    - Find Merchandising Associations
  - Logistics
    - Returns
    - Pick Batches
    - Releases Ready to Ship
    - Expected Inventory
    - Find Inventory
    - Inventory Reports
- Marketing Manager
  - Store
    - Approval Requests
    - Find Approval Requests
    - Approval Submissions
    - Find Approval Submissions
    - Collaborative Workspaces
  - Sales
    - Order Management Reports
    - Operational Reports
  - Marketing
    - Customer Segments
    - Campaigns
    - Campaign Activities
    - Promotions
    - E-Marketing Spots
    - Ad Copy
    - Experiments
  - Products
    - Catalog Management
    - Find Catalog Entries
    - Find Categories

- Find Bundles or Kits
    - Find Merchandising Associations
    - Sales Catalogs
- Pick Packer
  - Store
    - Approval Requests
    - Find Approval Requests
    - Approval Submissions
    - Find Approval Submissions
    - Collaborative Workspaces
  - Logistics
    - Pick Batches
    - Releases Ready to Ship
- Sales Manager
  - Store
    - Approval Requests
    - Find Approval Requests
    - Approval Submissions
    - Find Approval Submissions
    - Return Reasons
    - Report Delivery Settings
    - Collaborative Workspaces
  - Sales
    - Accounts
    - RFQs
    - Personalized Attributes
    - Find Customers
    - Find Orders
    - Find Returns
    - Order Management Reports
    - Operational Reports
    - Customer Care
    - Customer Care Queue
    - Approve Payment
    - Deposit Payment
    - Settle Payment
    - Find Payment
    - Find Payment Batch
  - Marketing
    - Customer Segments
    - Campaigns
    - Campaign Activities
    - Promotions
    - E-Marketing Spots
    - Ad Copy

- Products
  - Catalog Management
  - Find Catalog Entries
  - Find Categories
  - FInd Bundles or Kits
  - Find Merchandising Associations
- Auctions
  - View Auctions

12.1.2 Access

To open the WebSphere Commerce Accelerator:

1. Access the following Web address in your browser:

   `https://host_name:8000/accelerator`

   host_name is the fully qualified WebSphere Commerce Web server host name. The host name may be a virtual host name on the Web server.

2. From the WebSphere Commerce Logon page, type your WebSphere Commerce user name and password. The Select Store and Language page displays.

   Note: If only one store, one language, and one or no fulfillment center is defined, then the Select Store and Language page does not display. You go directly from the WebSphere Commerce Accelerator logon page to the home page.

3. Specify the name of the store you want to work. If you are authorized to work with a single store, the store name is preselected. Otherwise, do one of the following:

   - From the Store name pull-down list, select the name of the store.
   - If there are numerous stores to list, the system may prompt you to use the options under Find a store to search for a store. Under Find a store, in the Store name field, type the all or part of the store name. From the pull-down list beside this field, select how you want the system to perform your search. Click **Find**.
   - To list all stores you are authorized to work with, select **List All**.

   Note: This chapter deals with customer-facing, Extended Sites that were built using the B2B direct store model. Selecting any other types of stores will not produce the same results.

4. If you are assigned a role with fulfillment duties: select the name of the fulfillment center associated with the store from the Fulfillment center pull-down list.
5. From the Language to work in pull-down list, select the language in which you want to administer the store. If you are authorized to work with a single language, the language is preselected. If you are authorized to work with more than one of the WebSphere Commerce supported languages, the store's default language is preselected; however, you can select a different language from this list.
6. Click **OK**. The WebSphere Commerce Accelerator home page displays. Select the menu and menu option you want to work with. If you do not see the menu or menu option, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.

12.2 Store menu

The store menu contains functionality to manage the look and feel of the store as well as providing additional administrative functions that are not directly related to operations.

12.2.1 Store: Open/Close

This functionality is the same as for a consumer direct store. See 11.2.1, "Store: Open/Close" on page 331 for details about using this function.

12.2.2 Store: Change Profile

This functionality is the same as for a consumer direct store. See 11.2.2, "Store: Change Profile" on page 331 for details about using this function.

12.2.3 Store: Change Pages

This functionality is the same as for a consumer direct store. See 11.2.3, "Store: Change Pages" on page 332 for details about using this function.

The difference between consumer direct and B2B direct stores is the available text that can be changed. The fields that are available for a B2B direct store include:

- Header message
- Home
- Home - Title
- Order status - Waiting approval heading

- Order status - Previously processed heading
- Order Status - Scheduled heading
- Order Confirmation - Message
- Order Confirmation - Thank you
- Password notification
- Help

12.2.4 Store: Upload Logo

This functionality is the same as for a consumer direct store. See 11.2.4, "Store: Upload Logo" on page 333 for details about using this function.

12.2.5 Store: Change Style

This functionality is the same as for a consumer direct store. See 11.2.5, "Store: Change Style" on page 334 for details about using this function.

12.2.6 Store: Manage Files

This functionality is the same as for a consumer direct store. See 11.2.6, "Store: Manage Files" on page 335 for details about using this function.

12.2.7 Store: Change Flow

This functionality is the same as for a consumer direct store. See 11.2.7, "Store: Change Flow" on page 335 for details about using this function.

Although the functionality is the same between consumer direct and B2B direct stores, available options are not. The options for change flow in a B2B direct store are:

- Customer Care
  - Enable or disable Customer Care
- Collaborative Workspaces
  - Enable or disable Collaborative Workspaces
- Catalog
  - Include search in the store
  - Include quantity selection
  - Include quick orders
  - Include requisition lists
  - Include request for quotes
- Order
  - Enable customers to track order status
  - Enable customers to schedule orders

- Configurable Store Display
  - Enable or disable Configurable Store Display
    - Provide Current Order pane
    - Provide Requisition Lists pane
    - Provide Orders Awaiting Approval pane
    - Provide Order History pane
    - Provide Scheduled Orders pane
    - Provide e-Marketing Spot pane
  - Enable or disable AccountParticipantRole
    - Enable organization set in session selection
    - Enable contract set in session selection

12.2.8 Store: Change Shipping

This functionality is the same as for a consumer direct store. See 11.2.8, "Store: Change Shipping" on page 337 for details about using this function.

12.2.9 Store: Change Tax

This functionality is the same as for a consumer direct store. See 11.2.9, "Store: Change Tax" on page 341 for details about using this function.

12.2.10 Store: Payment Settings

This functionality is the same as for a consumer direct store. See 11.2.10, "Store: Payment Settings" on page 346 for details about using this function.

12.2.11 Store: Approval Requests

Approvers and administrators with the appropriate access can view approval requests and make approval decisions. To view approval requests:

1. From the Store menu, select **Approval Requests**. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.

   View the information on this page. For each request, it lists:

   ID A unique identification code for the request.

   Submitter The logon ID or other unique identifier for the user who initiated the approval request.

   Process The name of the business process for which approval has been requested.

Status	Indicates whether an approval request is pending, has been approved, or has been rejected.
Submitted on	The date and time of submission.

2. Select the check box next to the request you are working on.
3. Click **Approve** to approve the request or **Reject** to reject it.

   The requests that have been approved or rejected no longer appear in the list. A message box indicates whether the approval or rejection attempt was successful.
4. As an alternative to step 3, you can view a summary of approval requests:
   a. Click **Summary** to display the Summary page.
   b. After reviewing the details, click **Approve** or **Reject**.

      A message box indicates whether the approval or rejection attempt was successful. The Approval Requests page opens, showing the updated status of the request you are working on.

12.2.12 Store: Find Approval Requests

To search for a specific request or group of requests:

1. From the Store menu, select **Find Approval Requests**.

   The Find Approval Requests page opens.
2. Specify the criteria that are appropriate to your search:

Request Number	If you are searching for a specific request, type its ID number, if known.
Process	If you want to retrieve all requests for a specific process, select it here.
Submitter	To retrieve all requests received from a specific submitter, select the submitter.
Approver	(Displays only to Site Administrators) To retrieve all requests being reviewed by a specific approver, select the approver here.
Status	To retrieve all requests currently in a specific status, select the status.
Date	To retrieve all requests submitted either on a specific date or within a specific period, indicate criteria here.

3. Click **Find**. The Search Results - Approval Requests page displays.

   If only pending requests are retrieved, the page appears identical to the Approval Requests page except that the View field will be disabled. If the

search retrieves requests in an approved or rejected status, the page will include two additional columns: Approved On or Rejected On and Remarks. In addition, the Approve nor Reject buttons will be enabled.

12.2.13 Store: Approval Submissions

Submitters and administrators who have the appropriate access can view approval submissions and the status of their associated approval decisions. To view approval submissions:

1. From the Store menu, select **Approval Submissions**. The Approvals Submissions page displays.

   For each submission, the information on this page includes:

ID	A unique identification code for the request.
Approver	The logon ID or other unique identifier for the user who is reviewing the approval request.
Process	The name of the business process for which approval has been requested.
Status	Indicates whether an approval request is pending, has been approved, or has been rejected.
Submitted on	The date and time of submission
Remarks	(Displays only if status is Approved or Rejected) Comments explaining why a request was approved or rejected.
Approved on Date	(Displays only if status is Approved} Indicates date and time of approval.
Rejected on Date	(Displays only if status is Rejected) Indicates date and time of rejection.

2. Select the check box next to the approval submission that you are working on.
3. Click **Summary**. The Approval Submission detail page is displayed.

12.2.14 Store: Find Approval Submissions

To search for a specific submission or group of submissions.

1. From the Store menu, select **Find Approval Submissions**.

   The Find Approval Submissions dialog displays.

2. Specify the criteria appropriate to the search:

Request Number	If you are looking for a specific request, insert its ID number, if known.

Process	If you want to retrieve all requests for a specific process, select it here.
Approver	To retrieve all requests that are being reviewed by a specific approver, select the approver here.
Status	To retrieve all requests that have a specific status, select the status here.
Date	To retrieve all requests that were submitted either on a specific date or within a specific period, indicate the criteria here.

3. Click **Find**.

   The Search Results - Approval Submissions page displays. If all submissions or only pending submissions are retrieved, the page will be identical in appearance to the Approval Submissions page. If the search retrieves submissions in an approved or rejected status, the page will include two additional columns: Approved On or Rejected On and Remarks.

12.2.15 Store: Fulfillment Centers

This functionality is the same as for a consumer direct store. See 11.2.13, "Store: Fulfillment Centers" on page 348 for details about using this function.

12.2.16 Store: Return Reasons

This functionality is the same as for a consumer direct store. See 11.2.14, "Store: Return Reasons" on page 349 for details about using this function.

12.2.17 Store: Inventory Adjustment Code

This functionality is the same as for a consumer direct store. See 11.2.15, "Store: Inventory Adjustment Code" on page 350 for details about using this function.

12.2.18 Store: Message Type Configuration

This functionality is the same as for a consumer direct store. See 11.2.11, "Store: Message Type Configuration" on page 346 for details about using this function.

12.2.19 Store: Report Delivery Settings

This functionality is the same as for a consumer direct store. See 11.2.12, "Store: Report Delivery Settings" on page 348 for details about using this function.

12.2.20 Store: Collaborative Workspaces

This topic is outside the scope of this redbook.

12.3 Sales menu

The sales menu organizes options that aid in the management of pre-sales and post-sales activities.

12.3.1 Sales: Accounts

This option provides the capabilities for managing business accounts and contracts. For more information about these topics, see 2.5, "Business accounts and contracts" on page 29.

The following sections describe the steps to complete specific functions associated with the management of business accounts and contracts.

Create a business account

To create a new business account:

1. Open the WebSphere Commerce Accelerator.
2. From the Sales menu, click **Accounts**.

   The Account List page displays, containing business accounts currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Click **New**. The Account notebook displays.
4. Complete the fields for each page as required, and use the links on the left side to switch between pages.
5. Click **OK** to save the business account and close the notebook. The business account is displayed in the Account List page.

Change a business account

To change a business account:

1. Open the WebSphere Commerce Accelerator.
2. From the Sales menu, click **Accounts**.

   The Account List page displays, containing the business accounts that are currently defined for the selected store. If you do not see this menu, then your

logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.

3. Select the check box next to the business account that you want to change and click **Change**. This launches the Account notebook.
4. Update the fields for each page as required, and use the links on the left side to switch between pages.
5. Click **OK** to save the updated business account and close the notebook.

Delete a business account

To delete a business account:

1. Open the WebSphere Commerce Accelerator.
2. From the Sales menu, click **Accounts**. The Account List page displays, containing business accounts currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the business account that you want to delete and click **Delete**. The page should now display the updated list of business accounts.

View orders for a business account

To view orders for a business account:

1. Open the WebSphere Commerce Accelerator.
2. From the Sales menu, click **Accounts**. The Account List page displays, containing business accounts currently defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the business account that you want to view the orders for and click Orders. The Order List page displays showing orders under the account selected.

   This list offers the following tasks:

   – Create a new return.
   – View an order summary.
   – Change an order.
   – Add comments to an order.
   – Cancel an order.
   – Proceed with payment for an order.
   – Process an order payment.
   – View invoices for an order.

View account reports

To view the account and contract management reports:

1. Open the WebSphere Commerce Accelerator.
2. From the Sales menu, click **Accounts**. The Accounts list opens, showing the accounts defined for the store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to a business account and click **Reports**. The Account Management Reports list displays.

   Four account management reports are available:

   – Orders by Account: lists all of the orders associated with the selected account.
   – Spending by Limited Purchase Order Number: lists total spending, grouped by Limited Purchase Order Numbers for the selected account.
   – Refunds by Account: lists all of the refunds associated with the selected account.
   – Contracts Close to Expiry Date: lists all of the contracts associated with the selected account that are nearing their expiry date.
4. Click the title of the report you want to review. The selected report displays.

Create a new contract

To create a new contract:

1. Open the WebSphere Commerce Accelerator.
2. From the Sales menu, click **Accounts**. The Account List page opens, showing business accounts defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the business account that you want to create a new contract for and click **New Contract** to launch the Contract notebook.
4. Complete the fields for each page as required, and use the links on the left side to switch between pages.
5. Click **OK** to save the contract and close the notebook. The contract is displayed in the Contract List page.

View contracts for a business account

To view contracts for a business account:

1. Open the WebSphere Commerce Accelerator.
2. From the Sales menu, click **Accounts**. The Account List page opens, showing business accounts defined for the selected store. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your Site Administrator.
3. Select the check box next to the business account that you want to view the contracts for and click **Contracts**. The Contract List page opens, showing contracts under the account selected.

   From this page, you have the following options:

   - Create a new contract.
   - Import a contract using XML.
   - Create a new version of a contract.
   - Change a contract.
   - Submit a contract.
   - Deploy a contract.
   - Update the catalog filter.
   - Resume a suspended contract.
   - Suspend a contract.
   - Display a contract summary.
   - Export a contract to an XML file.
   - Display contract reports.
   - Duplicate a contract.
   - Cancel a contract.
   - Search for a contract.
   - Refresh the contracts list.
   - Delete a contract.

12.3.2 Sales: RFQs

Request for Quote (RFQ) is one of the trading mechanisms available in WebSphere Commerce. A buyer can create an RFQ for unique variations of goods and services that are offered in the catalog. If buyers cannot find a product in the catalog that matches their needs, they can select attributes from the personalized attributes dictionary to precisely define the product specifications.

A requisition list is used by buyers to add desired products to their RFQ. Buyers can include multiple products in one RFQ and define unique specifications for each product. They can include attachments on the RFQ or product specification level. They can also specify the terms and conditions for the transaction. When the buyer submits an RFQ request, it takes on a Future or Active state. Through

the WebSphere Commerce Accelerator, a seller can view the RFQ and submit a response when the request is in an Active state. A buyer can also change or cancel an RFQ.

When sellers respond to an RFQ, they have the option of responding to each attachment, terms and conditions, and product, as well as to each product specification or comment. They have the option of specifying a fulfillment center or substituting a product if the buyer has provided that option in the request. A seller can also modify or cancel a response.

After sellers have responded to the RFQ, the buyer closes the RFQ and evaluates the responses to choose a winner or multiple winners. When the RFQ response is accepted by the buyer and the seller is notified, the RFQ transaction is completed through one of the following processes:

- The buyer places an order that already contains the RFQ information.
- A contract already containing the RFQ information is created.
- The RFQ can go to next round.

A record of the RFQ is maintained in the RFQ List for a predetermined period so that the buyer can copy an RFQ that is used repeatedly. Responses are retained for the same period to facilitate a seller's response to similar requests from the same buyer.

While setting up WebSphere Commerce, the Site Administrator decides whether to enable the RFQ trading mechanism. If the decision is made to include the RFQ option, the Site Administrator must consider:

- Should approvals for the RFQ response process be enabled? If enabled, responses will be reviewed prior to transmittal to the buyer.
- Notification and job scheduling must be enabled to ensure that buyers and sellers are notified of changes in the status of RFQ requests and responses.

The initial RFQ page is accessed by selecting **RFQ** from the Sales menu.

This page enables sellers to manage RFQs that are received from all organizations that participate in their e-commerce exchange. The list can be sorted by the following columns: RFQ name, Status, Creation time, Submission date, and Closing date. The contents of the list can be displayed by the status of the RFQ request. The choices are:

All	All requests regardless of state
Active	Submitted by buyer
Closed	No more responses being accepted
Next Round	No more responses being accepted
Complete	Winners selected and notified

These functions are available to the seller administrator:

- Display RFQ request details
- Find RFQ requests
- Respond to RFQ request
- List responses

Display RFQ request details

To display the details of a selected RFQ request:

1. From the Sales menu, select **RFQs**.
2. Select the check box next to the RFQ request to view.
3. Click **Summary**.

Find RFQ requests

To find a particular RFQ request:

1. From the Sales menu, select **RFQs**.
2. Click **Find**.
3. Enter one or more search criteria.
4. Click **OK**.

Respond to RFQ request

1. From the Sales menu, click **RFQs**. This displays a list of RFQ requests.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

2. Select the check box next to the RFQ request that you want to respond to.
3. Click **Respond**. The General form displays.
4. Or, to determine whether any previous responses to this request exist before you create a new one, click **Responses**. The RFQ Response page displays any existing responses for the selected request.
5. Click New to create a new response. The General form displays.
6. Type the name for the response into the Name field.

   To avoid the possibility of duplicating an existing response name and the associated error message, your response name must be unique within the e-commerce site. For example, you could use a combination of unique personal information, date, time, and sequence number to create the name.

7. Type any remarks you wish to make into the Remarks text box.
8. Select the fulfillment center to be used from the list.

9. Determine whether all products must be accepted when the response is accepted by selecting **yes** or **no**. Details for performing the following actions are provided in the tasks listed in the Related Tasks section below.
10. Click Next to display the Attachments page.
11. After making any necessary responses to the attachments, click **Next** to display the Terms and Conditions page.
12. After making any necessary responses to the terms and conditions, click **Next** to display the Products page.
13. After making any necessary responses to the product price, quantity, units, specifications, or comments, click **OK**.

    When making a response, you also have the option to substitute a product. See "Substituting a product in an RFQ response" in the WebSphere Commerce online help.
14. When all product-related responses have been made, click **Finish** to transmit your response to the buyer.

    It will be submitted directly to the buyer if approval has not been enabled. If approval has been enabled, the response will be submitted to the approver for review.

    You may also modify, retract, or cancel the response at this time.

List responses

1. From the Sales menu, click **RFQs**.

   This displays a list of RFQ requests. If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Select the check box next to the RFQ request for which you want to view the responses.
3. Click **Responses**.

   The RFQ Response page displays any existing responses for the selected request. The RFQ response list shows the following information:

   - Response name
   - Remarks
   - Status
   - Creation time

12.3.3 Sales: Personalized Attributes

An attribute describes a characteristic of an object. Attributes are called *specifications* in WebSphere Commerce. Specifications are used to distinguish one product from another. Height, color, weight, and size are examples of an attribute or specification. A personalized attribute dictionary provides a list of attributes that buyers use to define the specifications that they want a product to have. They use the dictionary when preparing an RFQ request.

The Site Administrator creates and manages the specification definitions. Attributes that are used to create product specifications must be selected from the personalized attribute dictionary.

If buyers cannot find a product matching their needs in the catalog, they can select attributes from the personalized attributes dictionary to precisely define the product specifications. A free-form attribute field is available so that the buyer can propose a specification that is not available in the dictionary.

Add a new personalized attribute

Only individuals authorized by the site administrator may add attributes to the Personalized Attributes dictionary. To add a new attribute to the existing dictionary:

1. From the Sales menu, click **Personalized Attributes**. The Personalized Attribute list opens.
2. Click **New**. The New Personalized Attribute form displays.
3. Type the name for the new attribute in the Name field.
4. Type a complete description of the attribute in the Description text box field.
5. Select the appropriate data type from the Type list. The available attribute types are:
   - STRING
   - INTEGER
   - FLOAT
   - DATETIME
   - FREEFORM
   - BIGINT
   - ATTACHMENT
6. If additional security is required for the attribute, select **Yes** under the phrase `Should this attribute be encrypted?`
7. Clicking **OK** displays a confirmation message.
8. Click **OK** in the dialog box to return to the Personalized Attributes list.

Change an existing personalized attribute

Only individuals who are authorized by the site administrator may make changes to existing attributes. If you wish to add a new attribute to the existing personalized attribute dictionary:

1. From the Sales menu, select **Personalized Attributes**. The Personalized Attribute list displays.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Select the check box for the attribute that you want to change.
3. Click **Change**. The Change Personalized Attribute form displays.

   Make the necessary changes to the Description Type or encryption parameters.
4. Clicking **OK** displays a confirmation message.
5. Click **OK** in the dialog box to return to the Personalized Attributes list.

> **Note:** You cannot change the name of an existing attribute on the Change Personalized Attribute form. If you want to change the name of an existing attribute, the existing attribute must be deleted. Create a new attribute with the new name.

Delete an attribute from the personalized attribute dictionary

Only individuals who are authorized by the Site Administrator may delete existing attributes. To delete an attribute from the existing personalized attribute dictionary:

1. From the Sales menu, click **Personalized Attributes**. The Personalized Attribute list displays.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Select the check box for the attribute that you want to delete.
3. Click **Delete**. The Personalized Attribute list displays with the deleted attribute no longer shown.

12.3.4 Sales: Find Customers

This functionality is the same as for a consumer direct store. It can be found in the Operations menu when managing a consumer direct store. See 11.6.2, "Operations: Find Customer" on page 366 for details about using this function.

12.3.5 Sales: Find Orders

This functionality is the same as for a consumer direct store. It can be found in the Operations menu when managing a consumer direct store. See 11.6.5, "Operations: Find Orders" on page 369 for details about using this function.

12.3.6 Sales: Find Returns

This functionality is the same as for a consumer direct store. It can be found in the Operations menu when managing a consumer direct store. See 11.6.22, "Operations: Find a Return" on page 380 for details about using this function.

12.3.7 Sales: Order Management Reports

This functionality is the same as for a consumer direct store. It can be found in the Reports menu when managing a consumer direct store. See 11.7.7, "Reports: Order Management Reports" on page 407 for more about this function.

12.3.8 Sales: Operational Reports

This functionality is the same as for a consumer direct store. It can be found in the Reports menu when managing a consumer direct store. See 11.7.10, "Reports: Operational Reports" on page 409 for details about using this function.

12.3.9 Sales: Customer Care

This topic is outside the scope of this redbook.

12.3.10 Sales: Customer Care Queue

This topic is outside the scope of this redbook.

12.3.11 Sales: Approve Payment

This functionality is the same as for a consumer direct store. It can be found in the Operations menu when managing a consumer direct store. See 11.6.38, "Operations: Approve Payment" on page 391 for details about using this function.

12.3.12 Sales: Deposit Payment

This functionality is the same as for a consumer direct store. It can be found in the Operations menu when managing a consumer direct store. See 11.6.45, "Operations: Deposit Payment" on page 395 for details about using this function.

12.3.13 Sales: Settle Payment

This functionality is the same as for a consumer direct store. It can be found in the Operations menu when managing a consumer direct store. See 11.6.48, "Operations: Settle Payment Batch" on page 396 for more about this function.

12.3.14 Sales: Find Payment

This functionality is the same as for a consumer direct store. It can be found in the Operations menu when managing a consumer direct store. See 11.6.51, "Operations: Find Payment" on page 398 for details about using this function.

12.3.15 Sales: Find Payment Batch

This functionality is the same as for a consumer direct store. It can be found in the Operations menu when managing a consumer direct store. See 11.6.52, "Operations: Find Payment Batch" on page 400 for more about this function.

12.4 Marketing menu

The marketing menu contains options that pertain to the creation and deployment of online marketing efforts.

12.4.1 Marketing: Customer Segments

This topic was discussed in 10.4.2, "Marketing: Customer Segments" on page 312.

12.4.2 Marketing: Campaigns

This topic was discussed in 10.4.3, "Marketing: Campaigns" on page 315.

12.4.3 Marketing: Campaign Activities

This topic was discussed in 10.4.4, "Marketing: Campaign Activities" on page 316.

12.4.4 Marketing: Promotions

This topic was discussed in 10.4.5, "Marketing: Promotions" on page 318.

12.4.5 Marketing: E-Marketing Spots

This topic was discussed in 10.4.6, “Marketing: e-Marketing Spots” on page 318.

12.4.6 Marketing: Ad Copy

This topic was discussed in 10.5.6, “Marketing: Ad Copy” on page 323.

12.5 Products menu

The products menu has options that pertain to catalog and product management.

12.5.1 Products: Catalog Management

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.1, “Merchandise: Catalog Management” on page 352 for more about this function.

12.5.2 Products: Find Catalog Entries

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.2, “Merchandise: Find Catalog Entries” on page 354 for more about this function.

12.5.3 Products: Find Categories

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.3, “Merchandise: Find Categories” on page 354 for details about using this function.

12.5.4 Products: Find Bundles or Kits

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.4, “Merchandise: Find Bundles or Kits” on page 354 for more about this function.

12.5.5 Products: Find Merchandising Associations

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.5, “Merchandise: Find Merchandising Associations” on page 354 for details.

12.5.6 Products: Sales Catalogs

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.6, "Merchandise: Sales Catalogs" on page 354 for details about using this function.

12.5.7 Products: Expected Inventory

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.9, "Merchandise: Expected Inventory" on page 357 for details about this function.

12.5.8 Products: Vendors

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.10, "Merchandise: Vendors" on page 360 for details about using this function.

12.5.9 Products: Catalog Import

This functionality is the same as for a consumer direct store. It can be found in the Merchandise menu when managing a consumer direct store. See 11.4.8, "Merchandise: Catalog Import" on page 357 for details about using this function.

12.6 Auctions menu

The functionality of the Auctions menu is exactly the same for B2B direct stores as it is for consumer direct stores. The functionality provided by the Auctions menu is discussed in 11.5, "Auctions menu" on page 362.

12.7 Logistics menu

The logistics menu contains options that pertain to inventory management.

12.7.1 Logistics: Returns

Customers return products to a fulfillment center for many different reasons. Perhaps the customer was unhappy with the quality or performance of a product, or perhaps the product was legitimately defective. Returned inventory may be re-integrated into the pool of inventory available for order, or it may be discarded. This process is called disposition.

In the course of the disposition of a product, information about the customer's reported reason for returning it is recorded, in addition to information about the merchant or seller's perspective on the reason for that return. Then a disposition is determined and recorded, along with the reason for that decision.

Receiving returned products

1. From the Logistics menu, click **Returns**. The Returns list displays.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Select the check box next to the return for which you want to receive products.
3. Click **Receive** to open the Receive Products dialog.
4. Provide the date and the quantity to receive, and click **OK** to save the information.

   The Returns list displays, refreshed with the new information.

   Note: Even if all products have been received for a return, the Receive button will remain available until the ReturnCreditAndCloseScan scheduler command has been run, closing the receive record. Thus, it is possible for more products to be recorded as received in the system than were physically received in the fulfillment center if this command has not yet run.

Selecting the disposition of returned products

1. From the Logistics menu, click **Returns**. The Returns list displays.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.
2. Select the check box next to the return you want to work with.
3. Click **Returned Products** to open the Returned Products list.
4. Select the check box next to the returned product you want to work with.
5. Click **Disposition** to open the Disposition page.
6. Provide appropriate information for the fields.
7. Click **Add** to save the information.

Viewing return management reports

To create and view return management reports:

1. From the **Logistics** menu, click **Returns**. The Returns page displays.

   If you do not see this menu, then your logon ID does not have the appropriate authority to perform this task. Contact your site administrator.

2. Click **Reports** to display the Return Management Reports list.
3. Select one of the following reports:
   – Returns with Partial Receipts report
   – Return Receipts Not Disposed report
   – Outstanding Returns report
4. Complete the report selection criteria.
5. Click **OK**.

   The report content is displayed. From this page, you can print the report by clicking **Print** or you can display another report by clicking **OK**.

12.7.2 Logistics: Pick Batches

This functionality is the same as for a consumer direct store. It can be found on the Operations menu when managing a consumer direct store. See 11.6.12, "Operations: Find a Pick Batch" on page 375 for details about using this function.

12.7.3 Logistics: Released Ready to Ship

This functionality is the same as for a consumer direct store. It can be found on the Operations menu for a consumer direct store. See 11.6.17, "Operations: Find Releases Ready to Ship" on page 377 for more about this function.

12.7.4 Logistics: Expected Inventory

This functionality is the same as for a consumer direct store. It can be found on the Merchandise menu when managing a consumer direct store. See 11.4.9, "Merchandise: Expected Inventory" on page 357 for details about this function.

12.7.5 Logistics: Find Inventory

This functionality is the same as for a consumer direct store. It can be found on the Operations menu when managing a consumer direct store. See 11.6.33, "Operations: Find Inventory" on page 388 for details about using this function.

12.7.6 Logistics: Inventory Reports

This functionality is the same as for a consumer direct store. It can be found in the Reports menu when managing a consumer direct store. See 11.7.1, "Reports: Inventory Reports" on page 401 for details about using this function.

Appendixes

WebSphere Commerce implementation

This appendix describes the process that we followed for implementing WebSphere Commerce V5.6.1 Business Edition on our test servers. The starting point for the scenarios is a fully installed and tested two-tier WebSphere Commerce Business Edition V5.6.1 runtime environment.

This appendix is organized into the following sections:

- ITSO test environment
- Single-tier implementation
- Add remote database server
- Post-implementation steps

ITSO test environment

This section describes the hardware and software used in the ITSO test environment.

Hardware and software prerequisites

For detailed information about WebSphere Commerce V5.6.1 hardware and software requirements, refer to *WebSphere Commerce Installation Guide V5.6.1*.

Hardware used in the ITSO test environment

We used the following hardware within the ITSO runtime environment for a single-tier WebSphere Commerce node:

- WebSphere Commerce node
  - IBM ThinkCentre MT-M (8187-KU7)
    - 1 CPU, Intel® P4 3.0 GHz
    - 1563 MB main memory
    - 60 GB DASD
    - 1 IBM Ethernet adapter
    - Host name: `cmw2kpro1.austin.ibm.com`

Note: We strongly urge you to get additional memory. We ran into performance issues with only 1.5 GB of memory.

We used the following hardware within the ITSO runtime environment for a two-tier WebSphere Commerce implementation:

- WebSphere Commerce node
  - IBM ThinkCentre MT-M (8187-KU7)
    - 1 CPU, Intel P4 3.0 GHz
    - 1563 MB main memory
    - 60 GB DASD
    - 1 IBM Ethernet adapter
    - Host name: `cmw2kpro2.austin.ibm.com`

Software used in the ITSO test environment

Table A-1 details the software levels used in the ITSO test environment.

Table A-1 Software used in the ITSO test environment

Software	Version
Microsoft® Windows 2000 Server	2000 + Service Pack 4
Microsoft Internet Explorer®	6 + Service Pack 1
IBM DB2 UDB, Enterprise Server Edition	8.2.1 (8.1 + Fix Pack 5)
IBM HTTP Server	1.3.28
WebSphere Application Server	5.1.1.3 (5.1 + Fix Pack 1 + Fixes)
WebSphere Commerce, Business Edition * including WebSphere Commerce Payments * WebSphere Commerce store	5.6.1

Single-tier implementation

We completed the following high-level tasks to implement the single-tier WebSphere Commerce runtime environment. For details about installing a single-tier WebSphere Commerce node, refer to *WebSphere Commerce Installation Guide V5.6.1*.

- Windows installation
- WebSphere Commerce V5.6.1 installation

Windows installation

This section highlights only key issues, such as needing Windows 2000 Service Pack level 4 or higher, and user rights assigned to the administrator user that will be needed later for DB2.

Windows 2000 Service Pack 4

In our example, we installed Windows 2000 Server Service Pack 4.

Create admin user and assign user rights

To assign user rights to the administrator ID that is used by the WebSphere Commerce DB2 owner during instance creation:

1. Log on to Windows as an administrator.
2. Create a user ID and add the user to the administrators group. (For example, we created a user called `admin`.) You can use an existing administrator user.
3. Click **Start** → **Settings** → **Control Panel** → **Administrative Tools** → **Local Security Policy**.
4. From the Local Security Settings window, select and expand **Local Policies** → **User Rights Assignment**.
5. Ensure that the administrator user ID (for example, admin) has the user right assignments for the following Windows Local Security Policies that are needed for DB2:
   - Act as part of the operating system
   - Create a token object
   - Increase quotas
   - Log on as a service
   - Replace a process level token
6. Log on as the administrator user ID created and rights assigned needed for DB2.

Verify network configuration

Prior to installing WebSphere Commerce and supporting software components, it is important that you verify that your network is configured properly. We recommend that you use a static TCP/IP address and verify that the host name can be resolved with the name server.

To determine whether the IP address is mapped to a fully qualified host name, start a command prompt session and issue the following command:

```
nslookup 'IP_address'
```

The desired result is a reply with the correct fully qualified host name of the system.

WebSphere Commerce V5.6.1 installation

For details about installing WebSphere Commerce V5.6.1 on a single node using the IBM HTTP Server and DB2, refer to the *WebSphere Commerce Installation Guide V5.6.1*.

We accepted the default settings for most options. We used the WebSphere Commerce Installation Wizard to install WebSphere Commerce, WebSphere Application Server, IBM HTTP Server, and WebSphere Commerce Payments.

The key steps and options that we entered during the installation:

- We ran setup from the IBM WebSphere Commerce V5.6 CD 1.
- We selected **Quick Installation**.
- For Install Destination Path, we entered:

  `C:\WebSphere`

- We selected to install WebSphere Commerce Payments.
- We installed the software components to the following directories:
  - IBM DB2 UDB: `c:\websphere\sqllib`
  - IBM HTTP Server: `c:\websphere\IBMHTTPServer`
  - IBM WebSphere Application Server: `c:\websphere\AppServer`
  - IBM WebSphere Commerce: `c:\websphere\CommerceServer561`
- We used the `admin` user ID that was added to the administrator group and had rights assigned for DB2 in "Create admin user and assign user rights" on page 452.

Note: The Quick Installation process automatically creates WebSphere Commerce and WebSphere Commerce Payments instances. If you use the customer installation option, you must create the instances yourself after the installation process has completed.

If you use the Quick Installation process, the default setting (that a password is required to start WebSphere Payments) will be set. This requires that after you start the payments server you also have to start IBMPayServer. To start IBMPayServer:

1. Open a command line window.
2. Change directories to *wc_installdir*\payments\bin
3. Run the command **`IBMPayServer`** ***`instance_name password`***

   instance_name is the name of the WebSphere Payments instance.

   password is the password assigned to the WebSphere Payments instance.

Add remote database server

This section describes the tasks that are required to migrate the WebSphere Commerce and related databases to a remote DB2 Server.

This section includes the following tasks:

- Install Windows 2000
- Install DB2 V8.2.1 Enterprise Edition Server
- Backup and restore of databases
- Configure DB2 connectivity
- Verify the remote DB2 Server node configuration

Install Windows 2000

Refer to "Windows installation" on page 451 for details about required service levels of Windows 2000 and user right assignments for DB2.

Install DB2 V8.2.1 Enterprise Edition Server

To install the IBM DB2 V8.2.1 Enterprise Edition Server on the remote DB2 Server:

1. Insert the DB2 UDB V8.2.1 Enterprise Server Edition CD.
2. Run **Setup** to start the installation.
3. When the DB2 Installer window appears, click **Install Products**.
4. When the Select the Product to Install window appears, select **DB2 UDB Enterprise Server Edition** (default and only option) and click Next.
5. When the Welcome window appears, click **Next** to launch the DB2 Setup Wizard.
6. When the License Agreement window appears, review the agreement and select **I accept the terms in the license** agreement. Click **Next**.
7. When the Type of Installation window appears, select **Custom Install** and click **Next**.
8. When the Select the Installation Action window appears, select Install **DB2 UDB Enterprise Server Edition** and click **Next**.
9. When the Installation Action window appears, take note of the Response File check box. This can be used to capture your selection options for a future installation. When selecting Custom Install, by default most of the installation options are set to be installed. Click **Next**.

10.When the Select the Features you want to Install window appears, select the following options and click **Next**:

– Administration Tools: We accepted the default (all suboptions selected).

– Getting started: We deselected this option.

Note: This option may be useful to install if you are experimenting and have plenty of disk space.

– Client support: We accepted the default (all suboptions selected).

– Application Development tools: We accepted the default (all suboptions selected, especially Base Application Development Tools to load stored procedures), with one exception. We deselected **Warehouse Samples**, as we will also deselect Business Intelligence.

– Server Support: We accepted the default (all suboptions selected).

– Business Intelligence: We deselected this option. (This option is needed for WebSphere Commerce Analyzer.)

– Directory: `c:\ibm\sqllib`

Note: The selected options require about 400 MB of disk space.

11.When the Languages to Install window appears, select the desired language (for example, English), and click **Next**.

12.When the Set User Information for DB2 Administration Server window appears, enter the following and click **Next**:

Domain	We left this field blank.
User name	`db2admin`
Password	<password>
Confirm password	<password>

13.When the Set up the Administration Contact list appears, we accepted the default settings, then clicked **Next**.

14.At the warning message `Notification SMTP server has not been specified`, we clicked **OK**.

15.When the Create a DB2 instance window appears, we selected **Create the DB2 instance** and click **Next**.

16.When the Configure DB2 instances window appears, we accepted the default (DB2, DB2CTLSV) and clicked **Next**.

17.When the Prepare the DB2 tools catalog window appears, select **Do not prepare the DB2 tools catalog on this computer** and click **Next**.

18. When the Specify a contact for health monitor notification window appears, select **Defer the task after installation is complete**, and click **Next**.
19. When the Request satellite information window appears, accept the default settings and click **Next**.
20. When the Start copying files window appears, review the selected options and click **Finish**.
21. When the Setup is Complete window appears, click **Finish**.
22. Restart your system.

Backup and restore of databases

Now that everything is working on the single-tier WebSphere Commerce node:

- We create a backup of the WebSphere Commerce instance database and the WebSphere Commerce Payments database.
- We restore these databases on the newly added remote DB2 Server node.
- We drop the databases onto the WebSphere Commerce node.

For more information about DB2 backup, refer to the DB2 Administration Guide.

Back up databases on the WebSphere Commerce node

The high-level steps to back up the databases on the existing single-tier WebSphere Commerce node are:

1. Ensure that the WebSphere Commerce instance application server is stopped.
2. Ensure that the WebSphere Commerce Payments application server is stopped.
3. Create a backup directory that will be copied and restored on the remote DB2 Server node later. For example, we created the `c:\mall.db` directory.
4. Verify that no applications are connected to the databases:

   ```
   db2 list applications
   ```

   There should not be any connections because the applications that connect to the databases have been stopped. If there are connections that cannot be stopped, enter the following to enforce that no applications are connected:

   ```
   db2 force applications all
   db2 terminate
   db2stop
   db2start
   ```

5. To back up the databases:

   a. To back up the WebSphere Commerce instance database:

   ```
   db2 backup db mall to c:\mall.db
   ```

   b. To back up the WebSphere Commerce Payments database:

   ```
   db2 backup db wpm to c:\wpm.db
   ```

Restore databases to the remote DB2 Server node

To restore the WebSphere Commerce instance database and WebSphere Commerce Payments database to the remote DB2 Server node:

1. Copy the database backup directory containing the DB2 database backups from the WebSphere Commerce node to the remote DB2 Server node (for example, `c:\mall.db`).

2. Restore the WebSphere Commerce instance database and WebSphere Commerce Payments database on the remote DB2 Server node:

   ```
   db2 restore db mall from c:\mall.db
   db2 restore db wpm from c:\wpm.db
   ```

3. Perform an SQL query on the restore WebSphere Commerce instance database as a basic test that the restore worked properly:

   ```
   db2 connect to mall
   db2 select * from catalog
   db2 connect reset
   ```

Drop databases

After you have created a backup of the databases and restored them to the remote DB2 Server node, you can drop the databases on the single-tier WebSphere Commerce node by running the following commands from a DB2 command window:

```
db2 drop db mall
db2 drop db wpm
```

Important: Make sure that you have a backup before dropping the databases.

Configure DB2 connectivity

The objective of this section is to configure network connectivity between DB2 installed on the WebSphere Commerce node and the remote DB2 Server node.

Catalog the TCP/IP node

To catalog the TCP/IP node, follow these steps on the WebSphere Commerce node:

1. Ensure that DB2 Server or Administration Client is installed on the WebSphere Commerce node.
2. Ensure that DB2 Server is installed on the remote DB2 Server node.
3. Open a DB2 command prompt on the WebSphere Commerce node.
4. From a DB2 command window, type the following command:

   ```
   db2 catalog tcpip node node_name remote server_name server port_number
   ```

   For example:

   ```
   db2 catalog tcpip node db2win1 remote cmw2kpro2 server 50000
   ```

   port_number is the DB2 instance connection port found on the DB2 Server node in the c:\winnt\system32\drivers\etc\services file.

   Note: In our example, the connection port for the DB2 Server was 50001. The service name in our services file looked like:

   ```
   db2c_DB2 50001/tcp
   ```

   Alternatively, a service name can be used in place of the port number. If a service name is used, the port and service name must be added to the DB2 client system services file so that it can resolve where to find the system.

Attach to the remote DB2 Server

From a DB2 command window, type the following command:

```
db2 attach to node_name user dbuser using dbpassword
```

For example:

```
db2 attach to db2win1 user admin using <password>
```

Catalog the databases

After you have attached to the remote DB2 Server, catalog the WebSphere Commerce instance and WebSphere Commerce Payments databases from a DB2 command window:

```
db2 catalog db dbname at node node_name
```

For example:

```
db2 catalog db mall at node db2win1
db2 catalog db wpm at node db2win1
```

List databases

Notice that the databases are now remote when you list the DB2 database with the following command:

```
db2 list db directory
```

Verify the remote DB2 Server node configuration

After completing the database restore and connectivity configuration, verify that WebSphere Commerce in the two-tier configuration is functioning properly.

1. Restart the appropriate servers:
   - WebSphere Commerce node
     - IBM HTTP Server 1.3.28
     - IBM WebSphere Application Server V5 - server1
     - WebSphere Commerce instance application server
     - WebSphere Commerce Payments application server
   - DB2 Server node
     - DB2 Server
   - Verify the functionality of the WebSphere Commerce and WebSphere Commerce Payment administration tools and store.

Post-implementation steps

We took the following steps after completing the implementation procedures outlined in the preceding section.

Database backup

It would be a good idea at this time to reorganize the tables and run statistics on the commerce database. To complete this task:

1. Open a DB2 command window.
2. Enter the following commands:

```
db2 connect to dbname user dbuser using dbpassword
db2 reorgchk update statistics on table all
db2rbind dbname all -l logfile
```

   dbname is the name of the database housing the WebSphere Commerce Instance.

   dbuser is the user ID of the schema owner.

   dbpassword is the user password.

   logfile is the name of the file to write the log to.

3. Close the DB2 command window.

Before publishing a sample store to verify the runtime environment, you should create a backup of the WebSphere Commerce instance database (for example, `mall`) and WebSphere Commerce Payments database (for example, `wpm`).

For details, refer to the DB2 Administration Guide.

Start servers

Before you can publish a sample store to verify the runtime environment, you have to start the following servers on the WebSphere Commerce node:

- Start IBM HTTP Server.
- Start DB2 server.
- Start WebSphere Commerce instance application server.
- Start WebSphere Commerce Payments application server.

Start IBM HTTP Server

The IBM HTTP Server can be started from Windows services. Ensure that you have restarted the IBM HTTP Server after the WebSphere Commerce and WebSphere Commerce Payments instances were created in order for virtual

hosts, alias, and other directives to become active. The IBM HTTP Server is configured to start automatically on server restart.

Start DB2 server

The DB2 Server and supporting services can be started from Windows services. By default, the DB2 Server services are set to start automatically upon server restart.

Start WebSphere Commerce instance application server

To start the WebSphere Commerce instance application server, follow the instructions in "Starting and stopping servers" on page 476.

Start WebSphere Commerce Payments application server

To start the WebSphere Commerce Payments application server, follow the instructions in "Starting and stopping servers" on page 476.

Verify the runtime environment and store functionality

To verify the runtime environment, we publish a sample store and test the functionality of the store.

Publish a sample store

To publish a sample store:

1. Ensure that you have created a backup of the WebSphere Commerce instance and WebSphere Commerce Payments databases.
2. Ensure that the servers are started as listed in "Start servers" on page 460.
3. Start the WebSphere Commerce Administration Console by entering the following address in a Web browser:

   `https://host_name:8002/adminconsole`

   host_name is the host name of the WebSphere Commerce node.

   `8002` is the virtual host port defined in the httpd.conf and WebSphere Application Server.

   `adminconsole` is the alias defined in the httpd.conf

   https is used (SSL enabled)
4. Log on with the site administrator ID (for example, `wasadmin`).
5. Select **Site** and click **OK**.
6. From the menu, select **Store Archives** → **Publish**.

7. From the Store Archives page, the view is set to Default, which lists the composite (full features store archives) for each business model that is supplied with WebSphere Commerce.

   Check the store to publish (for example, **B2BDirect.sar**) then click **Next**.
8. On the Parameters page, note that by default the parameters store directory and identifier are set to Read only. Click **Next**.
9. When the Summary page appears, click **Finish** to begin the publishing process for the store archive.
10. Store publishing will schedule a job because this is a long task. You can monitor the store publish from the **Store Archives** → **Publish Status** page.

    If this is successful, the publishing status will change to Successful.
11. After the Publish Status changes to Successful, check the check box for the given publishing job, and click **Details**.
12. Click **Launch Store**, and click **OK** for the application Web path for the store.
13. Click **Logoff**.
14. From the store home page, add the URL of the store to Favorites and close the Web browser window.
15. Close the WebSphere Commerce Administration Console.

Compile JSPs for tools and store

We recommend that you precompile your JSPs for the WebSphere Commerce tools and store. Compiling the JSPs will significantly reduce the amount of time needed to load the WebSphere Commerce tools the first time they are accessed. By default, the WebSphere Application Server will compile the JSPs the first time the JSP is requested. This step is optional, but recommended.

WebSphere Commerce V5.6.1 has separate Web modules for the administration tools and store as follows:

- WebSphere Commerce Administration Console: SiteAdministrator.war
- WebSphere Commerce Accelerator: CommerceAccelerator.war
- WebSphere Commerce Organization Administration Console: OrganizationAdministration.war
- WebSphere Commerce Stores: Stores.war

Syntax: JspBatchCompiler.sh

```
JspBatchCompiler -enterpriseapp.name <name>
    [-webmodule.name <name>]
    [-cell.name <name>]
    [-node.name <name>]
    [-server.name <name>]
    [-classloader.parentFirst <true|false>]
    [-classloader.singleWarClassloader <true|false>]
    [-filename <jsp name>]
    [-keepgenerated <true|false>]
    [-verbose <true|false>]
    [-deprecation <true|false>]
```

For more information, refer to the WebSphere Application Server V5.1 Information Center (search on JspBatchCompiler) at:

`http://publib.boulder.ibm.com/infocenter/ws51help/index.jsp`

To batch compile JSPs for the WebSphere Commerce tools:

1. Ensure that the WebSphere Commerce instance application server is started.
2. Open a command window, and set up the command line by running setupCmdLine.bat from the *was_installdir*\bin directory.
3. To compile the JSPs for the WebSphere Commerce Administration Console (SiteAdministration.war), enter the following from the *was_installdir*\bin directory:

   ```
   JspBatchCompiler.bat -enterpriseapp.name WC_demo -webmodule.name
   SiteAdministration.war -server.name WC_demo -node.name cmw2kpro1
   -cell.name cmw2kpro1
   ```

4. Repeat the previous step for each webmodule.name:
   - CommerceAccelerator.war
   - OrganizationAdministration.war

   Note: You may want to wait to compile stores.war until after you have created your stores.

Verify the WebSphere Commerce tools

After compiling the JSPs for the WebSphere Commerce tools, verify that they are working properly.

WebSphere Commerce Administration Console

To start the WebSphere Commerce Administration Console, enter the following in a Web browser and log on as the site administrator (for example, `wasadmin`):

`https://host_name:8002/adminconsole`

WebSphere Commerce Accelerator

To start the WebSphere Commerce Accelerator, enter the following in a Web browser and log on as the site administrator:

`https://host_name:8000/accelerator`

WebSphere Commerce Organization Administration Console

To start the WebSphere Commerce Organization Administration Console, enter the following in a Web browser and log on as the site administrator:

`https://host_name:8004/orgadminconsole`

Create a test shopping transaction

Register a new user and complete a shopping transaction as follows:

1. Enter the following URL in a Web browser to access the sample store that was published, or access the store URL saved to the Favorites list of your Web browser from a previous step:

   `http://cmw2kpr01.austin.ibm.com/webapp/wcs/stores/servlet/ToolTech/index.jsp`

   Note: Depending on the number of stores that have been published, you may have a different store ID number, and if you published a store other than ToolTech you will have a different store directory name.

2. Register a new user. For example, we create a `testuser1` user.
3. Log on to the store as `testuser1`.
4. Purchase a product as testuser1. When prompted to enter the credit card information, we entered `4111111111111111` (15 1s) as a test number for Visa.

   Note: If you do not have a credit card type visible from the store checkout, most likely the WebSphere Commerce Payments application server was not running at the time of publishing. The sample store archives contain default payment information for credit card types for the offline payment cassette. To resolve this problem, republish the store or manually create an account, credit card type, and so on.

Verify payment

After the order is completed, the order should be awaiting payment approval within WebSphere Commerce Payments (assuming that you used the default offline cassette).

1. Enter the following URL to access the WebSphere Commerce Payments Administration Console:

   `https://`*`host_name`*`:5433/webapp/PaymentManager`

2. Log on to WebSphere Commerce Payments as the site administrator (for example, `wasadmin`).
3. Click **Approve** from the left navigational bar.
4. Check the check box for the order generated and click **Approved Selected**.

Index the information center

When you install WebSphere Commerce, it installs a local copy of the WebSphere Commerce Information Center. If you do not create an index, the context-sensitive help will not work. Each time that you click Help while using a tool, an error message will be displayed. To prevent this:

1. Open a browser window and enter the following URL:

   `http://`*`host_name`*`:8001/help/index.jsp`

2. When the Information Center is displayed, enter something in the search field and click **GO**.
3. You should see `Indexing...` above a progress bar in the left panel. Wait for this to complete, and close the browser.
4. You only have to do this once.

WebSphere Commerce Developer implementation

This appendix includes instructions for installing and configuring the development environment for customizing WebSphere Commerce V5.6.1 Business Edition.

The WebSphere Commerce Developer installation is organized as follows:

- Windows 2000 installation
- Install WebSphere Studio Application Developer V5.1.2
- Install WebSphere Studio Application Developer fixes
- Apply fixes to the test environment
- Install the WebSphere Commerce Toolkit

Windows 2000 installation

This section highlights the key issues that are addressed when installing Windows 2000 Server, such as using Windows 2000 Service Pack level 3 or higher, and user rights assigned to the administrator user that will be needed later for DB2.

Windows 2000 Service Pack 4

In our example, we installed Windows 2000 Service Pack 4.

Windows 2000 service levels

We installed the latest Windows 2000 service level critical updates on top of Service Pack 4.

Create admin user and assign user rights

To assign user rights to the administrator ID used by the WebSphere Commerce DB2 owner during instance creation:

1. Log on to Windows as an administrator.
2. Create a user ID and add the user to the administrators group (for example, we created a user called `admin`). Alternatively, you could use an existing administrator user such as your development logon ID.

   Note: This user can be your development user ID that you use to log on to the Windows system or db2admin.

   For our example, we created a user called `admin` to whom we assigned these user rights and added to the administrator group. Within our procedure, replace your administrator user ID where we have entered `admin` as a sample user ID.

3. Click **Start** → **Settings** → **Control Panel** → **Administrative Tools** → **Local Security Policy**.
4. From the Local Security Settings window, select and expand **Local Policies** → **User Rights Assignment**.
5. Ensure that the administrator user ID (for example, admin) has user right assignments for the following Windows Local Security Policies that are needed for DB2:
   - Act as part of the operating system

- Create a token object
- Increase quotas
- Log on as a service
- Replace a process level token

6. Log on as the administrator user ID that had necessary rights assigned for DB2.

Verify network configuration

Prior to installing WebSphere Commerce and supporting software components, it is important that you verify that your network is configured properly. We recommend that you use a static TCP/IP address and verify that the host name can be resolved with the name server.

Install WebSphere Studio Application Developer V5.1.2

This section describes the steps to take to install WebSphere Studio Application Developer V5.1.2. This must be done prior to the installation of the WebSphere Commerce Toolkit.

1. Insert the WebSphere Studio Application Developer V5.1.2 CD 1 into the CD-ROM drive.
2. Execute the program launchpad.exe.
3. Click **Install IBM WebSphere Studio Application Developer**
4. Click **Next**.
5. Accept the license agreement and click **Next**.
6. Enter `C:\WSAD512` as the default installation directory.

   Note: The default installation path is too long for configuration with the WebSphere Commerce Toolkit.

7. Click **Next**.
8. Ensure that **Integrated Test Environments** and **WebSphere Application Server V5.1** are checked and click **Next**.
9. Click **Next** to begin the installation process.
10. Click **Finish**.

    Note: We also installed the embedded messaging client and server.

11.Click **Install embedded messaging client and server**.

12.Click **Next**.

13.Accept the license agreement and click **Next**.

14.Enter `C:\WebSphereMQ` in the default directory and click **Next**.

15.Click **Next** to begin the installation process.

16.Click **Finish**.

17.Click **Exit**.

18.Remove the CD from the CD-ROM drive and reboot the system.

Install WebSphere Studio Application Developer fixes

As of this writing, there are two fixes to apply to WebSphere Studio Application Developer V5.1.2:

- Interim_fix004

  `http://www.ibm.com/support/docview.wss?uid=swg24007578`

- Interim_fix007

  `http://www.ibm.com/support/docview.wss?uid=swg24009376`

Install Interim_fix004

1. Make sure that you are logged in with an ID that has administrator authority.
2. Unzip the wsappdev512_interim_fix004.zip file to a temporary directory.
3. Start WebSphere Studio Application Developer V5.1.2.
4. Open the Install/Update perspective by clicking **Help → Software Updates → Update Manager**.
5. In the Feature Updates view, expand the **My Computer** section to open the directory where you unzipped the file.
6. Select **wsad512/interim_fix004/update/WebSphere Studio Application Developer 5.1.2 Interim Fixes**.
7. Double-click **Interim Fix 004 for WebSphere Studio Application Developer 5.1.2**.
8. Details about the fix are shown in the Preview view. Add this fix to the selected updates by clicking the **Install by adding to the Selected Updates** check box.

9. In the Preview view, click **Selected Updates**. The Selected Updates view shows the selected fixes. Right-click the **Selected Updates** view and select **Process All**.
10. The Install wizard opens. Click **Next**.
11. Access the license agreement and click **Next**.
12. The Optional Features page opens. Click **Next**.

    Important: Do not modify the selections. Changing the default choices may cause errors.

13. On the final page of the Install wizard, do not change the default installation location. Click **Finish** to begin the installation.
14. If you are warned that you are about to install an unsigned feature, click **Install** to continue.
15. When the installation is complete, you will be asked whether you want to restart WebSphere Studio. Click **Yes** to complete the installation. (This will not reboot your machine.)
16. To confirm that the installation was successful, expand the Install Configuration and verify that Interim Fix 004 for WebSphere Studio Application Developer 5.1.2 is now installed.
17. The installation is complete. You may now delete the file, wsappdev512_interim_fix004.zip, and its unzipped contents.

Install Interim_fix007

1. Make sure that you are logged in with an ID that has administrator authority.
2. Unzip the wsappdev512_interim_fix007.zip file to a temporary directory.
3. Start WebSphere Studio Application Developer V5.1.2.
4. Open the Install/Update perspective by clicking **Help → Software Updates → Update Manager**.
5. In the Feature Updates view, expand the **My Computer** section to open the directory where you unzipped the file.
6. Select **wsad512/interim_fix007/update/WebSphere Studio Application Developer 5.1.2 Interim Fixes**.
7. Double-click **Interim Fix 007 for WebSphere Studio Application Developer 5.1.2**.

8. Details about the fix are shown in the Preview view. Add this fix to the selected updates by clicking the **Install by adding to the Selected Updates** check box.
9. In the Preview view, click **Selected Updates**. The Selected Updates view shows the selected fixes. Right-click the **Selected Updates** view and select **Process All**.
10. The Install wizard opens. Click **Next**.
11. Access the license agreement and click **Next**.
12. The Optional Features page opens. Click **Next**.

    Important: Do not modify the selections. Changing the default choices may cause errors.

13. On the final page of the Install wizard, do not change the default installation location. Click **Finish** to begin the installation.
14. If you are warned that you are about to install an unsigned feature, click **Install** to continue.
15. When the installation is complete, you will be asked whether you want to restart WebSphere Studio. Click **Yes** to complete the installation. (This will not reboot your machine.)
16. To confirm that the installation was successful, expand the Install Configuration and verify that Interim Fix 007 for WebSphere Studio Application Developer 5.1.2 is now installed.
17. The installation is complete. You may now delete the file, wsappdev512_interim_fix007.zip, and its unzipped contents.

Apply fixes to the test environment

You must ensure that the WebSphere Application Server V5.1 test environment in WebSphere Studio Application Developer is at the same level as the production environment.

To apply fixes to the WebSphere Application Server 5.1 test environment, complete the following steps:

1. Insert the WebSphere Application Server Fixes CD (from your WebSphere Commerce package, provided with WebSphere Commerce Developer) into the CD-ROM drive of the machine where you have WebSphere Studio Application Developer installed.

2. Prepare the update installation wizard as follows:
   a. From the WebSphere Application Server Fixes CD, copy the updateInstaller directory to a temporary location on the hard drive.
   b. Start a command prompt session.
   c. Do the following in the command prompt session:
      i. Change directories to the updateInstaller directory on the hard drive.
      ii. Issue the following command:

      `WSAD_installdir\runtimes\base_v51\bin\setupCmdLine`

      iii. Start the update installation wizard by issuing the following command:

      `updateWizard`

      You can close the command prompt session at this point.
   d. When prompted to select the product to update, select **Specify product information** and enter the following path in the Installation directory field:

      `WSAD_installdir\runtimes\base_v51 and click Next.`
   e. Leave the update installation wizard open for the next step.
3. Apply WebSphere Application Server Version 5.1 Fix Pack 1 to your WebSphere Studio Application Developer installation as follows. The update installation wizard should still be open from the previous step.
   a. Select **Install fix packs** and click **Next**.
   b. In the Fix pack directory field, enter `CD-ROM drive:\BASE\fixpack` and click **Next**.
   c. Ensure that **was51_fp1_win** is selected and click **Next**.
   d. Deselect Embedded Messaging and click **Next**.
   e. Continue through the update installation wizard until the installation starts.
   f. When the installation has completed, click **Run Wizard Again**. This will leave the update installation wizard open to apply the required cumulative fix in the next step.
4. Apply WebSphere Application Server Version 5.1.1 Cumulative Fix 3 to your WebSphere Studio Application Developer installation as follows. The update installation wizard should still be open from the previous step.
   a. Select **Install fix packs** and click **Next**.
   b. In the Fix pack directory field, enter `CD-ROM drive:\BASE\fixpack` and click **Next**.
   c. Ensure that **was511_cf3_win** is selected and click **Next**.
   d. Continue through the update installation wizard until the installation starts.

e. When the installation has completed, click **Run Wizard Again**. This will leave the update installation wizard open to apply the require interim fixes in the next step.

5. Apply the WebSphere Application Server interim fixes to your WebSphere Studio Application Developer installation as follows. The update installation wizard should still be open from the previous step.
   a. Select **Install fixes** and click **Next**.
   b. In the Fix directory field, enter `CD-ROM drive:\WCDE_fixes` and click **Next**.
   c. From the list of available fixes, select **JDKiFix_win** and click **Next**.
   d. Continue through the update installation wizard until the installation starts.
   e. When the installation has completed, click **Run Wizard Again**.
   f. Select **Install fixes** and click **Next**.
   g. In the Fix directory field, enter `CD-ROM drive:\BASE\fixes` and click **Next**.
   h. From the list of available fixes, select **PQ99045** and click **Next**.
   i. Continue through the update installation wizard until the installation starts.
6. When the update installation wizard completes, click **Finish**.

Install the WebSphere Commerce Toolkit

To install the WebSphere Commerce toolkit:

1. Insert WebSphere Commerce Developer CD in the CD-ROM of the WebSphere Studio Application Developer machine. The WebSphere Commerce toolkit installation wizard should start automatically. If it does not, run setup.exe on the root of the WebSphere Commerce Developer CD.
2. Follow the instructions provided in the wizard.
3. Ensure that the install was successful by doing the following:
   a. Examine the contents of WCDE_installdir\logs\setup.log. If setup.log is empty or has errors, try running WCDE_installdir\bin\setup.bat from the command line.
   b. Check that the install could properly detect WebSphere Studio Application Developer on your system by ensuring that WCDE_installdir\bin\setenv.bat sets the WSAD_HOME environment variable to WSAD_installdir correctly.

You now have a fully functioning WebSphere Commerce development environment installed. This WebSphere Commerce development environment provides a lightweight WebSphere Commerce test environment that uses IBM Cloudscape™ as the WebSphere Commerce database.

Common procedures

This appendix describes several common procedures that are performed while installing or administering a site based on the Extended Sites model. Several scripts are provided to assist in these procedures. Refer to Appendix D, "Additional material" on page 489, for more information about how to access the provided scripts.

This appendix includes the following sections:

- Starting and stopping servers
- Delete sample data
- Delete instances
- Update the Web server plug-in
- Configure for reporting

Starting and stopping servers

During the course of setting up and opening your stores, you will start and stop the commerce and payments servers several times. A WebSphere Commerce instance is started and stopped as an application server called WC_*wc_instance_name* (where *wc_instance_name* is the name of the WebSphere Commerce instance you want to start or stop). We used the default name `demo`. To start a WebSphere Commerce instance called demo, you would start an application server called WC_demo.

The names of application servers are as shown in Table C-1.

Table C-1 Application server names

Application	Application server name
WebSphere Commerce	WC_*wc_instance_name*
WebSphere Commerce Payments	*wpm_instance_name*_Commerce_Payments_Server

By this convention, *wc_instance_name* is the name of the WebSphere Commerce instance (we used `demo`), and *wpm_instance_name* is the name of the WebSphere Commerce Payments instance (we used `wpm`).

WebSphere Commerce

To start a WebSphere Commerce application server:

1. Log on using a Windows user ID with Administrator authority.
2. Open a command line window.
3. Change directories to *was_installdir*\bin, where *was_installdir* is the installation directory for WebSphere Application Server.
4. Enter the command:

   ```
   startServer server_name
   ```

   In our case, *server_name* is `WC_demo`.
5. Wait for the following message to be displayed:

   ```
   Server server_name open for e-business
   ```
6. Close the command line window.

To stop a WebSphere Commerce application server:

1. Log on using a Windows user ID with Administrator authority.
2. Open a command line window.

3. Change directories to *was_installdir*\bin, where *was_installdir* is the installation directory for WebSphere Application Server.
4. Enter the command:

   `stopServer server_name`

   In our case, *server_name* is `WC_demo`.
5. Wait for the following message to be displayed:

   `Server server_name stop completed`
6. Close the command line window.

Note: The server names are case-sensitive.

WebSphere Commerce Payments

To start the WebSphere Commerce Payments server:

1. Log on using a Windows user ID with Administrator authority.
2. Open a command line window.
3. Change directories to *was_installdir*\bin, where *was_installdir* is the installation directory for WebSphere Application Server.
4. Enter the command:

   `startServer server_name`

   In our case, *server_name* is `wpm_Commerce_Payments_Server`.
5. Wait for the following message to be displayed:

   `Server server_name open for e-business`
6. Close the command line window.

To stop a WebSphere Commerce Payments server:

1. Log on using a Windows user ID with Administrator authority.
2. Open a command line window.
3. Change directories to *was_installdir*\bin, where *was_installdir* is the installation directory for WebSphere Application Server.
4. Enter the command:

   `stopServer server_name`

   In our case, *server_name* is `wpm_Commerce_Payments_Server`.
5. Wait for the following message to be displayed:

   `Server server_name stop completed`

6. Close the command line window.

Note: The server names are case-sensitive.

If the payments instance is password-protected, you must issue the `IBMPayServer` command as follows after starting the server as defined above:

1. Open a command line window.
2. Change directories to *wc_installdir*/payments/bin, where *wc_installdir* is the installation directory for WebSphere Commerce.
3. Enter the following command:

```
IBMPayServer wpm_instance_name wpm_instance_password
```

Delete sample data

When the ExtendedSites.sar file is published, it creates a shared catalog under the Extended Sites Catalog Asset Store. The stores that are created use this shared catalog. When you are ready to load your own data, you must remove the sample data but leave the catalog in place. A script has been provided that deletes this data.

Before you run the script

Note: This script assumes that you are using DB2 as your database. If you are using Oracle, the script must be modified.

This script was tested in a single-tier environment. It should work properly in a two-tier or three-tier environment as long as it is run on the application server or the database server.

Run the script

To execute the script to delete the sample catalog data perform these steps:

1. Ensure that the Commerce server is stopped.
2. Back up the WebSphere Commerce database.
3. Open a DB2 command window.
4. Change directories to the directory where the script is located.

5. Enter the command to run the script, using this syntax:

   ```
   DeleteSampleData.cmd dbName dbUser dbPassward
   ```

   dbName is the name of the database that houses the WebSphere Commerce instance.

   dbUser is the DB2 user ID that owns the schema.

   dbPassword is the password for the DB2 user ID that owns the schema.

6. Close the DB2 command window.

Now you can load your own catalog data.

Delete instances

I found myself doing this several times so instead of looking it up in the installation guide, I decided to include it in the book. These steps come in handy when you make mistakes that you cannot figure out. It is sometimes easier just to start over again. zzzz

Deleting a WebSphere Commerce instance

To delete a WebSphere Commerce instance:

1. Ensure that WebSphere Commerce is stopped. Refer to "Starting and stopping servers" on page 476.

   Note: The WebSphere Commerce Information Center does not need to be stopped when deleting a WebSphere Commerce instance.

2. If you are deleting a WebSphere Commerce instance from a deployment manager cell, remove the WebSphere Commerce instance from the deployment manager cell. For instructions, refer to "Removing an application server node from a cell" in the *WebSphere Commerce Installation Guide*.

3. Back up any critical or customized files found in the following directories:

   ```
   wc_installdir/instances/wc_instance_name
   was_installdir/logs/WC_wc_instance_name
   was_installdir/installedApps/host_name/WC_wc_instance_name.ear
   ```

   wc_instance_name is the name of the WebSphere Commerce instance that you want to delete.

4. Do one of the following:
   - If WebSphere Commerce is running in a standalone (non-federated) environment:

     Delete the WebSphere Commerce application server by issuing the following command from a command prompt:

     ```
     wc_installdir/bin/rmCommerceServer wc_instance_name
     ```

     wc_instance_name is the name of the WebSphere Commerce instance you want to delete.

     Note: Be sure to enter the name of the WebSphere Commerce instance, not the name of the WebSphere Commerce application server.

     In our case, the name of the instance is `demo`. The name of the server is `WC_demo`.

   - If WebSphere Commerce is running in a federated environment:

     Delete the WebSphere Commerce application server using the WebSphere Application Server Network Deployment Administration Console.

5. Delete the WebSphere Commerce instance from Configuration Manager:
   a. Start Configuration Manager.
   b. In Configuration Manager, under WebSphere Commerce, expand ***host_name*** → **Commerce** → **Instance List**.
   c. Right-click the instance you want to delete and select **Delete instance**. A dialog box displays confirming that you want to delete the instance. When the instance is deleted, a message displays. Click **OK**.
   d. Exit Configuration Manager.

6. Do one of the following sets of tasks, depending on the database you are using for WebSphere Commerce:
   - If you are using DB2:

     Drop the WebSphere Commerce database associated with the WebSphere Commerce instance you want to delete.

     To drop a local WebSphere Commerce database, issue the following commands from a DB2 command session:

     ```
     db2 drop db dbname
     ```

     db_name is the name of the WebSphere Commerce database.

To drop a remote database, issue the following commands from a DB2 command session on the WebSphere Commerce machine:

```
db2 attach to remote_db_node_name user dbuser using dbpassword
db2 drop db dbname
db2 uncatalog db db_alias
```

remote_db_node_name is the database node name that was specified when the WebSphere Commerce instance was created.

dbuser is the database administrator ID that was specified when the WebSphere Commerce instance was created.

dbpassword is the password for the database administrator.

dbname is the name of the WebSphere Commerce database.

db_alias is the alias under which the remote WebSphere Commerce database is cataloged on the WebSphere Commerce machine.

– If you are using Oracle, drop the WebSphere Commerce table space and delete the Oracle user associated with the WebSphere Commerce instance that you want to delete.

7. If any of the following directories exist, delete them:

```
wc_installdir/instances/wc_instance_name
was_installdir/logs/WC_wc_instance_name
was_installdir/temp/node_name/WC_wc_instance_name
```

node_name is the node name for WebSphere Application Server and *wc_instance_name* is the name of the WebSphere Commerce instance you deleted. The WebSphere Application Server node name is usually the same as the host name of the machine on which WebSphere Application Server is installed.

8. (Optional) If you plan to create a new WebSphere Commerce later with the same name as the instance you are deleting, delete the following directory if it still exists:

```
was_installdir/installedApps/cell_name/WC_wc_instance_name.ear
```

9. No additional steps have to be performed when using a local IBM HTTP Server.

   If you are using a remote IBM HTTP Server:

   a. Delete the following directory on the remote IBM HTTP Web server node:

   ```
   was_installdir/installedApps/host_name/WC_wc_instance_name.ear
   ```

   instance_namee is the name of the WebSphere Commerce instance you are deleting.

   b. Restart the Web server.

10. If you plan to use other WebSphere Application Servers after deleting the WebSphere Commerce instance, you must regenerate the WebSphere Application Server plug-in configuration file. For information about regenerating the WebSphere Application Server plug-in configuration file, refer to "Update the Web server plug-in" on page 483.

Deleting a WebSphere Payments instance

To delete a WebSphere Commerce Payments instance:

1. Ensure that WebSphere Commerce Payments is stopped. Refer to "Starting and stopping servers" on page 476.

   Note: The WebSphere Commerce Information Center does not have to be stopped when deleting a WebSphere Commerce instance.

2. Delete the WebSphere Commerce Payments instance from Configuration Manager:
   a. Start Configuration Manager.
   b. In Configuration Manager, under **WebSphere Commerce**, expand ***host_name*** → **Payments** → **Instance List**.
   c. Right-click the instance you want to delete and select **Delete Payments Instance**. A dialog opens confirming that you want to delete the instance.
   d. When the instance is deleted, a message displays. Click **OK**.
   e. Exit Configuration Manager. This also deletes the WebSphere Commerce Payments application server, enterprise application, and virtual hosts.
3. Depending your database for WebSphere Commerce Payments:
   – If you are using DB2, drop the WebSphere Commerce Payments database associated with the WebSphere Commerce Payments instance you want to delete.

     To drop a local WebSphere Commerce Payments database, issue the following commands from a DB2 command window:

     ```
     db2 drop db dbname
     ```

     dbname is the name of the WebSphere Commerce Payments database.

     To drop a remote WebSphere Commerce Payments database, issue the following commands from a DB2 command session on the WebSphere Commerce Payments machine:

     ```
     db2 attach to remote_db_node_name user dbuser using dbpassword
     db2 drop db dbname
     db2 uncatalog db db_alias
     ```

– If you are using Oracle, drop the WebSphere Commerce Payments table space and delete the Oracle user associated with the WebSphere Commerce Payments instance you want to delete. For instructions on dropping a table space and deleting an Oracle user, refer to the Oracle documentation.

4. Delete the following directories if they exist:

```
wc_installdir/instances/wpm_instance_name
wc_installdir/payments/instances/wpm_instance_name
was_installdir/logs/wpm_instance_name_Commerce_Payments_Server
was_installdir/installedApps/host_name/
wpm_instance_name_Commerce_Payments_App.ear
```

   wpm_instance_name is the name of the WebSphere Commerce Payments instance that you want to delete.

5. Do the following steps, depending on your Web server:

   a. Open *HTTPServer_installdir*/conf/httpd.conf in a text editor.

   b. Remove all sections delimited by the following text:

```
IBM WebSphere Payments (Do not edit this section)
End of IBM WebSphere Payments (Do not edit this section)
```

   There will be multiple sections in the file delimited by the text. Remove the delimiting text as well.

   c. Save the changes and exit the text editor.

   d. Restart the Web server.

6. If you plan to use other WebSphere Application Server application servers after deleting the WebSphere Commerce Payments instance, you must regenerate the WebSphere Application Server plug-in configuration file as described in the next section.

Update the Web server plug-in

Periodically, you must update the WebSphere Application Server plug-in for IBM HTTP Server. This is required after changing the host name on the local computer. These steps complete the process in a Windows environment:

1. Open the Services window.
2. Right-click **IBM WebSphere Application Server V5 - Server 1**.
3. Click **Start**. A status window appears. Wait for it to go away.
4. Right-click **IBM HTTP Server 1.3.28**.
5. Click **Stop**. A status window appears. Wait for it to go away.

6. Right-click **IBM HTTP Server Administration 1.3.28**.
7. Click **Stop**. A status window appears. Wait for it to go away.
8. Leave the Services window open because you will need it later.
9. Open the WebSphere Application Server Administrative Console by clicking **Start → Programs → IBM WebSphere → Application Server → Administrative Console**.
10. After the logon page is displayed, enter an account to track activity and click **OK**. The Administrative Console displays in the browser.
11. Expand **Environment** in the column on the left of the page and click **Update Web Server Plugin** (Figure C-1).

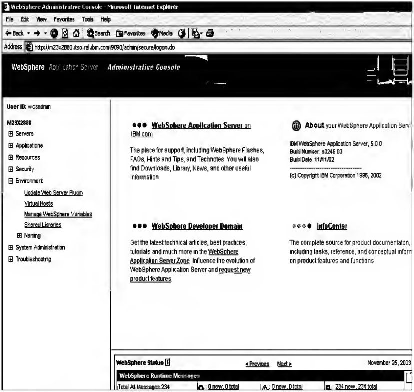


Figure C-1 WebSphere Application Server Administrative Console

12. Click **OK** to update the plug-in, as shown in Figure C-2. A message opens, indicating that the Web server plug-in configuration was updated successfully.

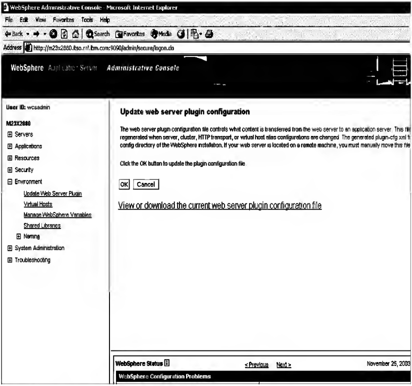


Figure C-2 Update Web server plug-in configuration

13. Close the browser.
14. Return to the Services window.
15. Right-click **IBM WebSphere Application Server V5 - Server 1**.
16. Click **Stop**.
17. Right-click **IBM HTTP Server 1.3.28**.
18. Click **Start**.
19. Right-click **IBM HTTP Server Administration 1.3.28**.
20. Click **Start**.
21. Close the **Services** window.

Configure for reporting

More than 50 reports are provided with WebSphere Commerce. To display data on many of these reports, several configuration steps must be taken.

Note: This puts additional load on both the application and database servers. A great deal of data will be stored in the commerce database depending on the number of hits on your site. Make sure that your environment can handle the additional workload and disk storage requirements before enabling these components.

Configuring Marketing Events statistical counters

To configure the Marketing Events statistical counters:

1. Open the Configuration Manager.
2. Expand the node with your machine name, expand the Instance list, and select the instance you want to modify.
3. Expand the **Components** section of the tree.
4. Select the statistics that you want to capture during site usage. You can enable the following components:
   - CampaignRecommendationListener
   - CampaignRecommendationStatisticsListener
   - OrdersMgpPersistListener

     Note: Do not enable these listeners:
     - ProductAdvisorInvocationListener
     - ProductComparisonInvocationListener
     - ProductExplorerInvocationListener
     - SalesAssistantInvocationListener

     They are for the Product Advisor, which is not currently enabled for hosted stores.

   a. For each component, check the **Enable Component** check box.

   b. Click the **Advanced** tab.

   c. Check the **Start** check box.

   d. Click **Apply**.
5. Select the **UserTrafficEventListener** component.
6. Check the **Enable Component** check box.

7. Click the **Advanced** tab.
8. Click **Apply**.
9. Close the Configuration Manager.
10. Stop and start your WebSphere Commerce Server according to the instructions in "Starting and stopping servers" on page 476.

Configuring the display source for statistical counters

To configure the location from which statistical data is displayed:

1. Open the Configuration Manager.
2. Expand the node with your machine name, expand **Instances**, and select the instance you want to modify.
3. Select the CommerceAccelerator listing and enter the host name of the machine from which you want to serve campaign statistics in the Statistic Source field. By default, this is the machine where the WebSphere Commerce Accelerator is located.

   You can enter the host name of the production server or of a development server if you do not have access to the production server through either the Internet or your intranet.

   If you enter the host name of a development server, you will have to export the statistics from the production server to the specified development server prior to viewing the statistics.

   Furthermore, if the machine from which you want to serve statistics is different from the machine where you originally log in, you should add the port number to the host name. This host name will be used when users click Statistics in the Campaign list.
4. Click **Apply**.
5. Close the Configuration Manager.
6. Stop and start your WebSphere Commerce Server according to the instructions in "Starting and stopping servers" on page 476.

Configuring caching to capture user traffic data

To set the level of caching performed on user traffic data:

1. Open your *wc_instance_name*.xml file, which is located in this directory:

   WC_installdir\instances\instance_name\xml

2. Find a code fragment similar to this:

```
<LogSystem name="Log System">
   <messageLog display="false" notification="false"
notificationClassName="com.ibm.commerce.messaging.ras.ErrorNotificationH
andler" />
   <activityLog display="false">
<userTraffic cacheSize="20" />
      <accessLogging cacheSize="32" logAllRequests="false" />
   </activityLog>
</LogSystem>
```

Note: In the example fragment, the element in bold controls the caching level of user traffic logging. Setting it to 1 ensures that the USRTRAFFIC table is written to every time a URL is requested. Setting it to 20, for example, will cause a write to the USRTRAFFIC table after 20 URLs have been requested. The lower this number is, the more likely it is to affect performance.

3. In addition, the value must be set to `true` in the <start> element of the following sample fragment in your *wc_instance_name*.xml file:

```
<component
compClassName="com.ibm.commerce.event.usertraffic.UserTrafficEventListen
er"
     enable="true" name="UserTrafficEventListener">
   <property display="false">
      <start enabled="true" />
   </property>
  </component>
```

4. Save the file.

5. Stop and start your WebSphere Commerce Server according to the instructions in "Starting and stopping servers" on page 476.

Additional material

This book refers to additional material that can be downloaded from the Internet as described below.

Locating the Web material

The Web material associated with this redbook is available in soft copy on the Internet from the IBM Redbooks Web server. Point your Web browser to:

`ftp://www.redbooks.ibm.com/redbooks/SG246683`

Alternatively, you can go to the IBM Redbooks Web site at:

`ibm.com/redbooks`

Select the **Additional materials** and open the directory that corresponds with the redbook form number, SG246683.

Using the Web material

The additional Web material that accompanies this redbook includes this file:

File name	*Description*
SG246683.zip	Zipped Code Samples

System requirements for downloading the Web material

The following system configuration is recommended:

Hard disk space:	10 GB minimum
Operating System:	Windows 2000 with SP4
Processor:	2 GHz or higher
Memory:	2 GB

How to use the Web material

Create a subdirectory (folder) on your workstation, and unzip the contents of the Web material zip file into this folder.

Catalog load

The catalog load directory contains the files `samplecatalog.csv` and `images.zip`. These are used to load sample data into the B2C3 store. See "Load sample catalog" on page 172 for details of the process.

Dynamic caching

The cachespec.xml file that ships with the WebSphere Commerce Business Edition V5.6.1 does not work with the Extended Sites model; therefore, we disabled dynamic caching. (See "Clean up the cache" on page 131.)

We have provided a cachespec.xml file that works with our sample scenario as described in this book. To use this file:

1. Stop the commerce and payments servers.
2. Open a command line window on the commerce server machine.
3. Change directories to:

   was_installdir`\installedApps\`*node_name*`\`*WC_wc_instance_name*`.ear\Stores.war\WEB-INF`
4. If you have not already changed the name of the cachespec.xml file to `oldcachespec.xml`, do so now.
5. Copy the cachespec.xml file from the *temporary_directory*\Dynamic caching directory to this directory.
6. Restart the commerce and payment servers.

New Products

The New Products directory contains catalog_images.zip. This file has the images required for the products that we added to our B2C2 store. (See "Add new products" on page 156.)

MemberRegistrationAttributes

The MemberRegistrationAttributes directory contains the file MemberRegistrationAttributesChanges.xml. When making changes as described in 8.10.1, "System modification" on page 190, cut and paste the contents of MemberRegistrationAttributesChanges.xml into MemberRegistrationAttributes.xml in the position identified.

Site Agreement

This directory contains two sample store agreements that were exported from our test server. They can be modified and imported using the Import Store option on the Extended Sites hub. See 10.2.5, "Extended Sites: Import Store" on page 275 for more information.

The files are:

- B2BAgreementExport.xml

  This is an export of one of our B2B direct stores.

- B2CAgreementExport.xml

  This is an export of one of our consumer direct stores.

To use these files, you must customize them to fit your particular implementation.

Glossary

access control policy A group of constraints and criteria, established by the Site Administrator, that restrict a user's access only to those resources that are necessary for carrying out the responsibilities relevant to their assigned role.

access group A type of member group that is used to define access control. Commands and views are associated with one or more access groups, enabling members assigned to that role to have access to those views and commands.

Buyer (buy-side) A defined role in WebSphere Commerce that makes purchases from the Seller's Web site on behalf of a customer account. Typically, purchases are made under one or more agreements that have been negotiated with the Seller.

Buyer (sell-side) A defined role in WebSphere Commerce that handles negotiations and ordering, keeps track of inventory, makes purchase order decisions, tracks reasons for returns, and tracks expected inventory records and receipts.

cassette In WebSphere Commerce Payments, a software component that supports a particular payment protocol (such as VistaNet or BankServACH) within the WebSphere Commerce Payments framework. A cassette consists of a collection of Java classes and interfaces that can be easily installed into other software components to extend their function.

Contract States
Active - An active contract has been deployed successfully and can have purchases made against it. If the expiry date for a contract has passed, the contract remains in the active state until it is cancelled.
Deployment failed - If a contract cannot be published to the server, the contract is set to the deployment failed state. Check error logs, attempt to correct the problem that prevents deployment of the

Contract States:
Approved - If the contract's designated approvers decide that a contract is complete and acceptable, they can move the contract into the approved state. WebSphere Commerce automatically attempts to deploy an approved contract.
Rejected - If the designated approver for a store decides that a contract is not complete or is unacceptable, they can move the contract into the rejected state. A contract in the rejected state can be changed and resubmitted for approval, cancelled, or marked for deletion.
Deployment in progress - A contract that is in deployment is an approved contract being published to the server. Purchases cannot be made against the contract. In XML files and the WebSphere Commerce database tables, this state appears as DeploymentInProgress.

Contract States (continued)
contract, and try to deploy the contract again. In XML files and the WebSphere Commerce database tables, this state appears as DeploymentFailed.
Closed - An active, suspended, or approved contract goes to the closed state automatically when a new version of the contract has been approved. Creating a new version of a contract creates a copy of the contract and places the copy in the draft state.
Suspended - When a contract is suspended, purchases cannot be made against that contract. The contract cannot be changed, but it can be resumed, making the contract active again.
Cancelled - A cancelled contract is no longer in use but is left in the database for reference.
Mark for delete - A contract that is marked for deletion can no longer be accessed using WebSphere Commerce. In XML files and the WebSphere Commerce database tables, this state appears as MarkForDelete.
Initial - This state represents the starting point of the contract life cycle.
Draft - A draft contract is a newly created contract, a contract that has been imported from an external source as a draft contract, or a contract that has been created by duplicating an existing contract. A contract in draft state is incomplete and not ready to be submitted for approval. The sales manager or account representative decides when a draft contract is ready to submit for approval.
Pending (approval) - A contract in the pending state is a draft contract that is complete and has been submitted for approval. The sales manager or account representative decides when a draft contract is ready to submit for approval. The designated approvers for the contract must review the contract. Products cannot be purchased under a contract in this state.

Fulfilment Status The fulfillment status of the OrderItem:
INT - not yet released for fulfillment
OUT - released for fulfillment
SHIP - shipment confirmed

Inventory Status The allocation status of inventory for the OrderItem:
NALC - inventory is neither allocated nor backordered
BO - inventory is backordered
ALLC - inventory is allocated
FUL - inventory has been released for fulfillment

Order Status
A - payment authorization requires review Payment authorization has encountered an unusual circumstance, such as an address verification warning. The payment authorization should be reviewed and accepted, or the Order should be canceled, using the Order Management user interface. If the authorization is accepted, then the user interface will change the Order Status to either B or C as appropriate.
B - backordered An initial authorization has been performed. A re-authorization for the full amount will be done when all backordered items are allocated.
C - complete Payment for the full amount has been authorized.

Order Status (continued)
D - deposited Payment has been captured.
E - CSR edit A Customer Service Representative is working with the Order.
F - ready for remote fulfillment The Order is ready to be sent to a remote system for fulfillment. This status is used by the MQAdapter feature and the TransferOrder task command.
G -waiting for remote fulfillment The Order has been sent to a remote system for fulfillment. This status is used by the MQAdapter feature and the TransferOrder task command.
H - error in remote fulfillment This status is associated with these conditions:
(1) An order has been submitted for transfer and the distributor responded with a "failed transfer" confirmation. The failure may be due to an invalid user ID or password. The error code for the transfer is stored in the ORDSTAT table OSCODE column and the error status message can be located in the ORDSTAT table OSCMT column. (2) An empty quotation order arrived due to quotation failure.
I - submitted The customer has submitted the Order but has not yet initiated payment.
L - low inventory The customer has initiated payment. A previously allocated (or backordered) OrderItem has become unavailable.
M - payment initiated The customer has initiated payment. Authorization is pending.
N - approval denied Approval has been denied for some OrderItems.
P - pending The customer can modify this Order.
Q - quick order profile The Order contains default information for a customer, such as shipping address and payment information that can be copied when creating a new pending Order.
R - released All OrderItems have been released for fulfillment.
S - shipped. All OrderItems have been manifested.
T - temporary Used by the Order Management user interface to temporarily back up an Order.
W - waiting for approval Not all OrderItems have obtained approval.
X - canceled. The Order has been canceled.
Y - private requisition list The Order is a private requisition list.
Z - shareable requisition list The Order is a shareable requisition list.

Payment Status
Approved
Deposited
Closed
Void
Declined

release. In a WebSphere Commerce store, a set of products in a given order that have the same ship-to address, fulfillment center, and shipping carrier. Products in a release may be shipped in multiple packages. For example, a release could contain four computer monitors. It would not be practical to ship them all in one large box, but they are still considered a single release. Products that would otherwise be part of a single release may be released separately if the Seller's policy dictates.

RMA Status
PRC = being edited by a customer
EDT = being edited by a Customer Service Representative
PND = pending
APP = approved
CLO = closed
CAN = canceled

sales catalog. A view of the master catalog containing a more flexible structure for customer display purposes. While a store can have only one master catalog, it can have any number of sales catalogs.

Seller Administrator. The Seller Administrator managements the information for the selling organization. The Seller Administrator creates and administers the suborganizations within the selling organization and the various users in the selling organization, including the assignment of appropriate business roles.

Seller. (1) A defined role in WebSphere Commerce that has access to all WebSphere Commerce Accelerator capabilities. (2) The role that supervises the overall store objectives and management, in addition to tracking the store sales. The Seller role is equivalent to a merchant.

Store Status - The current status of the hosted service agreement or store. A service agreement or store can have the following states:

Open - A hosted store exists for the seller and is open to customers.

Closed - A hosted store exists for the seller and is not open to customers.

Suspended - A hosted store exists but the service agreement is suspended. Customers cannot access the hosted store and the seller cannot open the store.

Deploying - The hosted service agreement is being deployed. The hosted store is created as part of this deployment process.

Deployment Failed - Deployment of the hosted service agreement has failed. No hosted store has been created.

Abbreviations and acronyms

ATP	available to promise
CA	certificate authority
CCF	common connector framework
CSR	Customer Service Representative
DTD	document type definition
EDI	electronic data interchange
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
IBM	International Business Machines Corporation
IDE	integrated development environment
ITSO	International Technical Support Organization
jar	Java Archive
JDBC™	Java Database Connectivity
JMS	Java Message Service
JSP	JavaServer Pages
LDAP	Lightweight DIrectory Access Protocol
ODBC	Open Database Connectivity
QoS	quality of service
RFQ	request for quote
RMA	Return Merchandise Authorization
ROI	return on investment
sar	store archive
SET	Secure Electronic Transaction
SKU	stock keeping unit
SMTP	Simple Mail Transfer Protocol
SSL	secure sockets layer
TCP/IP	Transmission Control Protocol/Internet Protocol
WAS	WebSphere Application Server
WC	WebSphere Commerce
WCA	WebSphere Commerce Analyzer
WSAD	WebSphere Studio Application Developer
XML	Extensible Markup Language

Related publications

The publications listed in this section are considered particularly suitable for a more detailed discussion of the topics covered in this redbook.

IBM Redbooks

For information about ordering these publications, see "How to get IBM Redbooks" on page 501. Note that some of the documents referenced here may be available only in softcopy.

WebSphere Commerce Redbooks

- *Best Practices and Tools for Creating WebSphere Commerce Sites*, SG24-6699
- *e-Commerce Hosting Solutions Guide, Using WebSphere Commerce V5.5 Business Edition*, SG24-7018
- *Keeping Commerce Applications Updated: WebSphere Commerce 5.1 to 5.6 Migration Guide*, SG24-6320
- *Shipping Simplified: Integrating WebSphere Commerce with Third-party Shipping Providers*, REDP-3910
- *Taking WebSphere Commerce to the Edge: Improving Performance with Dynacache and Akamai*, SG24-6456
- *WebSphere Commerce Portal V5.4 Solutions Guide*, SG24-6890
- *WebSphere Commerce V5.4 Catalog Design and Content Management*, SG24-6855
- *WebSphere Commerce V5.5 Handbook, Customization and Deployment Guide*, SG24-6969
- *WebSphere Digital Media Enable V5.5 Solutions*, SG24-6085

WebSphere Redbooks

We recommend the following IBM Redbooks for WebSphere Application Server V5 and WebSphere Studio Application Developer V5:

- *IBM WebSphere Application Server V5.1 System Management and Configuration: WebSphere Handbook Series*, SG24-6195
- *IBM WebSphere V5.0 Security WebSphere Handbook Series*, SG24-6573

- *IBM WebSphere V5.1 Performance, Scalability, and High Availability: WebSphere Handbook Series*, SG24-6198
- *WebSphere Studio Application Developer Version 5 Programming Guide*, SG24-6957

Other Redbooks

The following IBM Redbooks may be useful for specific integration topics with WebSphere Commerce and supporting software:

- *DB2 UDB/WebSphere Performance Tuning Guide*, SG24-6417
- *Enhance Your Business Applications: Simple Integration of Advanced Data Mining Functions*, SG24-6879
- *Enterprise Business Portals II with IBM Tivoli Access Manager*, SG24-6885
- *IBM Certification Study Guide - pSeries AIX System Administration*, SG24-6191
- *IBM HTTP Server (powered by Apache): An Integrated Solution for IBM eServer iSeries Servers*, SG24-6716
- *Measuring e-business Web Usage, Performance, and Availability*, SG24-6931
- *Patterns: Custom Designs for Domino & WebSphere Integration*, SG24-6903

Online resources

These Web sites and URLs are also relevant as further information sources:

- WebSphere Application Server Information Center

  `http://www.ibm.com/software/webservers/appserv/infocenter.html`
- IBM WebSphere Commerce V5.6, Business Edition
  - Home page

    `http://www.ibm.com/software/genservers/commerce/wcbe/index.html`
  - Technical Library

    `http://www.ibm.com/software/genservers/commerce/wcbe/library/lit-tech-general.html`
  - Support

    `http://www.ibm.com/software/genservers/commerce/wcbe/support/`
- IBM WebSphere Commerce Zone (development information)

  `http://www.software.ibm.com/wsdd/zones/commerce/`

- IBM Services for IBM WebSphere Commerce Software

  http://www.ibm.com/software/genservers/commerce/services/

- How to Buy IBM WebSphere Commerce

  http://www.ibm.com/software/swprod/swprod.nsf/(BuildHTBPage)?OpenAgent&DocID=BMAL-5KSR6N

- Understanding Extended Sites in WebSphere Commerce

  http://www.ibm.com/developerworks/websphere/library/techarticles/0503_mirlas/0503_mirlas.html

- Customizing the store creation wizard in WebSphere Commerce 5.6

  http://www.ibm.com/developerworks/websphere/library/techarticles/0503_mistry/0503_mistry.html

- Using the WebSphere Commerce V5.6 auto build and deployment tool

  http://www.ibm.com/developerworks/websphere/library/techarticles/0410_mulukutla/0410_mulukutla.html

- WebSphere Commerce Security Guide

  http://www.ibm.com/support/docview.wss?uid=swg27003947

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Create customizable, lightweight storefronts

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Consumer direct and B2B direct store models

This IBM Redbook provides IT architects, IT specialists, and administrators with the critical knowledge to design, develop, implement, deploy, and manage multiple consumer direct and B2B direct stores based on the Extended Sites model using WebSphere Commerce V5.6.1. This book includes:

- An introduction to the WebSphere Commerce Extended Sites model
- An ITSO Extended Sites example, including a business requirements analysis and solution design
- How to implement a team development environment, customize a store profile, and build, deploy, and manage multiple stores
- How to manage an Extended Sites hub, hub organization, and hosted stores
- How to manage an Extended Sites B2B direct store and organizations
- How to manage an Extended Sites consumer direct store and organizations

The appendixes include procedures and tips for WebSphere Commerce implementation, WebSphere Commerce Developer implementation, common procedures, and error handling scenarios.

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